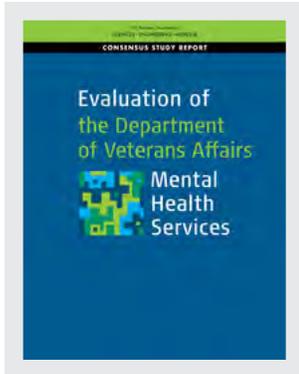


This PDF is available at <http://nap.edu/24915>

SHARE    



Evaluation of the Department of Veterans Affairs Mental Health Services

DETAILS

466 pages | 8.5 x 11 | PAPERBACK
ISBN 978-0-309-46657-8 | DOI 10.17226/24915

CONTRIBUTORS

Committee to Evaluate the Department of Veterans Affairs Mental Health Services; Board on Health Care Services; Health and Medicine Division; National Academies of Sciences, Engineering, and Medicine

GET THIS BOOK

FIND RELATED TITLES

Visit the National Academies Press at NAP.edu and login or register to get:

- Access to free PDF downloads of thousands of scientific reports
- 10% off the price of print titles
- Email or social media notifications of new titles related to your interests
- Special offers and discounts



Distribution, posting, or copying of this PDF is strictly prohibited without written permission of the National Academies Press. (Request Permission) Unless otherwise indicated, all materials in this PDF are copyrighted by the National Academy of Sciences.

Copyright © National Academy of Sciences. All rights reserved.

Evaluation of the Department of Veterans Affairs Mental Health Services

Committee to Evaluate the Department of Veterans Affairs
Mental Health Services

Board on Health Care Services

Health and Medicine Division

A Consensus Study Report of
The National Academies of
SCIENCES • ENGINEERING • MEDICINE

THE NATIONAL ACADEMIES PRESS

Washington, DC

www.nap.edu

PREPUBLICATION COPY—Uncorrected Proofs

THE NATIONAL ACADEMIES PRESS 500 Fifth Street, NW Washington, DC 20001

This activity was supported by Contract/Grant No. VA77713A0009 between the National Academy of Sciences and the U.S. Department of Veterans Affairs. Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project.

International Standard Book Number-13: 978-0-309-46657-8

International Standard Book Number-10: 0-309-46657-1

Digital Object Identifier: <https://doi.org/10.17226/24915>

Additional copies of this publication are available for sale from the National Academies Press, 500 Fifth Street, NW, Keck 360, Washington, DC 20001; (800) 624-6242 or (202) 334-3313; <http://www.nap.edu>.

Copyright 2018 by the National Academy of Sciences. All rights reserved.

Printed in the United States of America.

Suggested citation: National Academies of Sciences, Engineering, and Medicine. 2018. *Evaluation of the Department of Veterans Affairs Mental Health Services*. Washington, DC: The National Academies Press. doi: <https://doi.org/10.17226/24915>.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

The **National Academy of Sciences** was established in 1863 by an Act of Congress, signed by President Lincoln, as a private, nongovernmental institution to advise the nation on issues related to science and technology. Members are elected by their peers for outstanding contributions to research. Dr. Marcia McNutt is president.

The **National Academy of Engineering** was established in 1964 under the charter of the National Academy of Sciences to bring the practices of engineering to advising the nation. Members are elected by their peers for extraordinary contributions to engineering. Dr. C. D. Mote, Jr., is president.

The **National Academy of Medicine** (formerly the Institute of Medicine) was established in 1970 under the charter of the National Academy of Sciences to advise the nation on medical and health issues. Members are elected by their peers for distinguished contributions to medicine and health. Dr. Victor J. Dzau is president.

The three Academies work together as the **National Academies of Sciences, Engineering, and Medicine** to provide independent, objective analysis and advice to the nation and conduct other activities to solve complex problems and inform public policy decisions. The National Academies also encourage education and research, recognize outstanding contributions to knowledge, and increase public understanding in matters of science, engineering, and medicine.

Learn more about the National Academies of Sciences, Engineering, and Medicine at www.nationalacademies.org.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Consensus Study Reports published by the National Academies of Sciences, Engineering, and Medicine document the evidence-based consensus on the study's statement of task by an authoring committee of experts. Reports typically include findings, conclusions, and recommendations based on information gathered by the committee and on the committee's deliberations. Each report has been subjected to a rigorous and independent peer-reviewed process, and it represents the position of the National Academies on the statement of task.

Proceedings published by the National Academies of Sciences, Engineering, and Medicine chronicle the presentations and discussions at a workshop, symposium, or other event convened by the National Academies. The statements and opinions contained in proceedings are those of the participants and are not endorsed by other participants, the planning committee, or the National Academies.

For information about other products and activities of the National Academies, please visit www.nationalacademies.org/about/whatwedo.

**COMMITTEE TO EVALUATE THE DEPARTMENT OF
VETERANS AFFAIRS MENTAL HEALTH SERVICES**

ALICIA L. CARRIQUIRY (*Chair*), Iowa State University
F. JAY BREIDT, Colorado State University
DENNIS M. DONOVAN, University of Washington
SUSAN V. EISEN, Boston University School of Public Health (retired)
CONSTANTINE GATSONIS, Brown University School of Public Health
ROBERT C. GRESEN, Medical College of Wisconsin
STEVEN HEERINGA, University of Michigan
KENNETH W. KIZER, University of California, Davis
JOHN W. KLOCEK, Baylor University (through August 19, 2016)
RICHARD A. KULKA, Consultant, Statistical, Survey and Social Research, Raleigh, NC
BRUCE G. LINK, University of California Riverside
SUSAN M. PADDOCK, RAND Corporation
DEBORAH K. PADGETT, New York University
BETHANY J. PHOENIX, University of California, San Francisco
ROBERT L. SANTOS, The Urban Institute
JEANNETTE E. SOUTH-PAUL, University of Pittsburgh
THANH V. TRAN, Boston College
PETER M. YELLOWLEES, University of California, Davis

Study Staff

LAURA AIUPPA DENNING, Study Co-Director
ABIGAIL MITCHELL, Study Co-Director
MARC MEISNERE, Associate Program Officer
HEATHER L. CHIARELLO, Research Associate (through October 2016)
JOSEPH GOODMAN, Senior Program Assistant
CHRISTIE BELL, Financial Officer
ROBERT POOL, Editor
FREDERICK (RICK) ERDTMANN, Director, Board on the Health of Select Populations
(through July 2016)
SHARYL NASS, Director, Board on Health Care Services (from January 2017)

Reviewers

This Consensus Study Report was reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the National Academies of Sciences, Engineering, and Medicine in making each published report as sound as possible and to ensure that it meets the institutional standards for quality, objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process.

We thank the following individuals for their review of this report:

Margarita Alegría, Harvard Medical School and Massachusetts General Hospital,
Disparities Research Unit

Robert A. Barish, University of Illinois at Chicago

Jonaki Bose, Substance Abuse and Mental Health Services Administration,
U.S. Department of Health and Human Services

John Boyle, ICF International

Babette Brumback, University of Florida

Eric Goplerud, NORC at the University of Chicago

Joel B. Greenhouse, Carnegie Mellon University

Ronald C. Kessler, Harvard Medical School

Richard C. Larson, Massachusetts Institute of Technology

Richard A McCormick, MetroHealth/Case Western Reserve University

Bernadette Mazurek Melnyk, The Ohio State University

Harold A. Pincus, Columbia University

Terri Tanielian, The RAND Corporation

Although the reviewers listed above provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations of this report nor did they see the final

draft before its release. The review of this report was overseen by **Dan G. Blazer**, Duke University School of Medicine, and **Bradford H. Gray**, The Urban Institute. They were responsible for making certain that an independent examination of this report was carried out in accordance with the standards of the National Academies and that all review comments were carefully considered. Responsibility for the final content rests entirely with the authoring committee and the National Academies.

Preface

Approximately 4 million U.S. service members took part in the wars in Afghanistan and Iraq. Shortly after troops started returning from their deployments, some active-duty service members and veterans began experiencing mental health problems. Given the stressors associated with war, it is not surprising that some service members developed such mental health conditions as posttraumatic stress disorder, depression, and substance use disorder. Subsequent epidemiologic studies conducted on military and veteran populations that served in the operations in Afghanistan and Iraq provided scientific evidence that those who fought were in fact being diagnosed with mental illnesses and experiencing mental health–related outcomes—in particular, suicide—at a higher rate than the general population.

Media reports also brought to the nation’s attention problems that veterans were having obtaining timely health care appointments and high-quality care through the Department of Veterans Affairs (VA) health system (that is, the Veterans Health Administration, VHA). Addressing the health needs of the large influx of veterans presented a substantial challenge to the VHA. In the National Defense Authorization Act of 2013, Congress included a mandate for the National Academies of Sciences, Engineering, and Medicine (the National Academies) to conduct a study to assess the VHA’s mental health care services and provide recommendations to assist the VHA with improving its services. The report that follows details the work of the National Academies’ study committee that was appointed to carry out this task.

Gathering the evidence on which the committee developed its findings, conclusions, and recommendations was an enormous task. We on the committee used a multipronged approach to build the evidence base necessary to complete our work by conducting a survey of veterans who served in the operations in Afghanistan and Iraq; visiting 21 areas of the country to talk with veterans and their families, VHA employees, and others who work with the veteran population; conducting multiple literature searches; holding public meetings; and obtaining performance data collected by the VA on its mental health services.

Those of us on the committee could not have accomplished its task without the assistance of the many people who provided valuable information about the VA and the agency’s mental health services. First and foremost, I would like to thank all of the veterans and their families who took time to tell us

their stories and about their experiences getting health care at VHA facilities. Their input was critical to the committee's understanding of their health-related needs.

I would like to extend my sincere thanks to several individuals at the VA who assisted us by responding to our many requests for information. Stacy Gavin from the Office of Mental Health and Suicide Prevention effectively coordinated our requests with others at the VA to send us the information we needed in a timely manner. Rani Hoff from the Northeast Program Evaluation Center compiled a complex set of data for the committee from several groups within the VA so that we could conduct the survey of veterans. Dawne Vogt from the VA's National Center for PTSD assisted the committee with developing a brief instrument to measure combat exposure to include in the committee's survey of veterans.

Over the course of the study, the committee held several public meetings to obtain information from subject-matter experts. We committee members are grateful to have heard from the following people and I thank them for taking time to meet with us:

David Carroll, Office of Mental Health and Suicide Prevention, VA
 Carolyn Clancy, Veterans Health Administration, VA
 Mike Davies, Access and Clinic Administration Program, VA
 Peter Duffy, Colonel, US Army (Ret), The National Guard Association of the United States
 John Fairbank, VISN 6 Mental Illness Research, Education and Clinical Center, VA
 Warren Goldstein, The American Legion
 Rani Hoff, Northeast Program Evaluation Center, VA
 Joy Ilem, Disabled American Veterans
 Kenneth Jones, Office of Academic Affiliations, VA
 Daniel Kivlahan, Seattle VA Medical Center
 Laura Krejci, Office of Patient Centered Care and Cultural Transformation, VA
 Harold Kudler, Durham VA Medical Center
 David Latini, Office of Academic Affiliations, VA
 Thomas Lynch, Veterans Health Administration, VA
 Jacqueline Maffucci, Iraq and Afghanistan Veterans of America
 Jennifer Patterson, Office of Patient Centered Care and Cultural Transformation, VA
 Andrew Pomerantz, Integrated Services, Mental Health Services, VA
 Stacy Pommer, Office of Academic Affiliations, VA
 Paula Schnurr, National Center for PTSD, VA
 Mary Schohn, Office of Mental Health and Suicide Prevention, VA
 Howard Somers and Jean Somers, Coronado, CA
 Jodie Trafton, Program Evaluation and Resource Center, VA
 Janet Vertrees, Office of Patient Centered Care and Cultural Transformation, VA
 Kendra Weaver, Mental Health Clinical Operations, VA

The committee worked closely with Westat, an independent research corporation, on the conduct of the survey of veterans and the site visits. We appreciate the hard work put forth by Westat team members to produce the array of technical products necessary to support the committee's work. I thank the Westat project director, Shelley Perry, along with her team members.

I was honored to chair the committee and lead a group of very knowledgeable and hardworking individuals. Their dedication to this study, which took place over 4 years, is commendable. I would like to thank Thomas Horvath for his committee service during the initial period of the study. I also would like to thank the staff from the National Academies who guided the committee through the study process.

Laura Aiuppa and Abigail Mitchell directed the study and kept us on task. Heather Chiarello and Marc Meisnere assisted the committee with research and with writing the report. Joseph Goodman provided administrative support and handled the logistics for our committee meetings; he made sure that all 16 meetings ran smoothly. Constance Citro, Director of the National Academies' Committee on National Statistics, and Krisztina Marton provided valuable input on the committee's survey.

Finally, I thank the VA for providing support for this study. We hope that the committee's recommendations will help the VHA to improve mental health care for veterans.

Alicia L. Carrquiry, *Chair*

Committee to Evaluate the Department of Veterans Affairs Mental Health Services

Contents

PREFACE	ix
ABBREVIATIONS AND ACRONYMS	xxiii
SUMMARY	1
Committee’s Approach to Its Charge	2
Key Findings.....	2
Conclusions and Recommendations	4
1 INTRODUCTION	13
Committee’s Charge	15
Committee’s Approach to Its Charge	15
Organization of the Report	16
References	17
2 THE VETERANS HEALTH ADMINISTRATION	19
Transition from Active Duty to Veteran Status	19
Eligibility and Enrollment	20
The Veterans Health Administration Organizational Structure	21
Mental Health Services in the Broader U.S. Health Care Sector Compared to the Veterans Health Administration	22
References	24

3	THE VETERANS HEALTH ADMINISTRATION'S MENTAL HEALTH SERVICES	27
	Mental Health–Related Programs and Services	29
	Programs and Centers Supporting Quality of Mental Health Services	35
	Summary	40
	References	41
4	CLINICAL MANAGEMENT OF MENTAL HEALTH CONDITIONS AT THE VETERANS HEALTH ADMINISTRATION	45
	Mental Health Conditions in Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn Veterans	46
	Screening, Assessment, and Treatment	58
	Summary	71
	References	71
5	METHODOLOGY	79
	Approach	79
	Survey Methods	80
	Site Visit Methods	91
	Literature Review Methods	99
	Study Limitations	99
	References	102
6	DEPARTMENT OF VETERANS AFFAIRS MENTAL HEALTH SERVICES: NEED, USAGE, AND ACCESS AND BARRIERS TO CARE	103
	Eligibility and Priority for Department of Veterans Affairs Health Care Services	104
	Key Characteristics of the Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn Cohort Who Use and Do Not Use Veterans Health Administration Services	108
	Need for and Use of Department of Veterans Affairs Health Care Services	116
	Barriers and Facilitators to Service Use	127
	Barriers: Individual Factors	143
	Factors That May Influence Future Use	149
	Summary	159
	References	163
7	DIMENSIONS OF QUALITY IN MENTAL HEALTH CARE	167
	Defining Health Care Quality	167
	Integrated Systems Approach to Quality	168
	System Transformation in the Department of Veterans Affairs	170
	Report Framework	170
	References	172
8	MENTAL HEALTH WORKFORCE AND FACILITIES INFRASTRUCTURE	175
	Mental Health Workforce	175
	Physical Infrastructure	189
	Geographic Access	192

Summary	194
References	195
9 TIMELY ACCESS TO MENTAL HEALTH CARE	199
Wait Times and Scheduling Care at the VA	199
Programs to Improve Timely Access to VHA Care	209
Practices to Facilitate Timely Access	216
Summary	218
References.....	219
10 PATIENT-CENTERED CARE AND THE VETERAN EXPERIENCE	221
Patient-Centered Care at the Veterans Health Administration	222
Veteran Experiences with Receiving Mental Health Care at the Veterans Health Administration	224
Summary	230
References	231
11 EFFECTIVE MENTAL HEALTH CARE	233
Availability of Evidence-Based Practices for Mental Health in the Department of Veterans Affairs	233
Delivery of Mental Health Care in the Veterans Health Administration	236
Summary	247
References	248
12 EFFICIENT MENTAL HEALTH CARE	253
Mental Health Workforce Tracking and Efficiency	253
Care Integration and Collaboration	254
Findings from the Committee’s Site Visits	260
Summary	262
References	263
13 EQUITABLE MENTAL HEALTH CARE	265
Disparities in Diagnosis	265
Treatment Disparities	266
Access to Mental Health Care Services for Select Populations	267
The Department of Veterans Affairs Office of Health Care Equity	282
Stigma	282
Reducing Stigma	285
Summary	286
References.....	287
14 HEALTH TECHNOLOGY FOR MENTAL HEALTH CARE	293
Electronic Health Record	293
Telemedicine	294
Other Health Technology in Use at the Department of Veterans Affairs	301
Technological Barriers in the Department of Veterans Affairs	305

Summary	306
References	307
15 QUALITY MANAGEMENT	311
Quality Measurement.....	311
Mental Health Care Quality Measurement in the Department of Veterans Affairs System	313
Quality Improvement Innovations	317
Summary	318
References.....	319
16 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	321
Key Findings	321
Conclusions and Recommendations	326
References	334
APPENDIXES	
A SUPPORTING DOCUMENTATION FOR THE SURVEY	335
B SUPPORTING DOCUMENTATION FOR THE SITE VISITS	417

Boxes, Figures, and Tables

BOXES

6-1	Department of Veterans Affairs Priority Groups	106
12-1	Integration Framework	255
12-2	Stepped-Care Model for Mental Health at the VHA	258

FIGURES

3-1	Algorithm to determine appropriate placement of veterans within the system of mental health care at the Department of Veterans Affairs.	28
5-1	Flowchart of questionnaire modules.	85
5-2	Data collection plan as originally designed.	87
5-3	Map showing approximate Department of Veterans Affairs medical center location for each site visit.	95
5-4	Number and percentage of interviews and group discussions by venue.	96
5-5	Number and percentage of participants by type.	97
5-6	Number and percentage of veteran participants by service branch.	98
6-1	Number of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans versus number of non-OEF/OIF/OND veterans enrolled in each Department of Veterans Affairs (VA) priority group in FY 2016.	108

6-2	Number of OEF/OIF/OND veterans enrolled in each VA priority group versus number of OEF/OIF/OND veterans enrolled and using VA health care services in FY 2016.	109
6-3	Veteran population by Veterans Integrated Service Network, FY 2015.	114
9-1	Actual versus VA calculated wait time for mental health appointments.	204
11-1	Average number of veteran mental health visits for fiscal years 2013–2017.	242
12-1	Continuum of VA mental health services.	259
15-1	VHA Mental Health Management System Framework.	315

TABLES

3-1	MIRECCs in the VHA	36
3-2	VA Centers of Excellence	37
3-3	National Center for Posttraumatic Stress Disorder Focus Areas by Division	39
4-1	Comparison of <i>DSM-IV-TR</i> Criteria to <i>DSM-5</i> Criteria for PTSD	48
4-2	Comparison of <i>DSM-IV-TR</i> Criteria to <i>DSM-5</i> Criteria for Substance Use Disorders (SUDs)	50
4-3	Prevalence of Mental Health Conditions and Suicide Rates in Veteran and Non-Veteran Populations	52
4-4	Example of the Scope of Mental Health Practice for Five Main Types of Health Care Providers	59
4-5	Mental Health Screening in the VA	61
5-1	Second-Phase Stratification and Sample Sizes	82
5-2	Timeline of Actual Data Collection Activities	88
5-3	Final Survey Status at End of Data Collection	88
5-4	Final Survey Completes, by User and Need Status	89
5-5	Five Raking Cells	91
5-6	Site Visit Data Collection Modality and Location by Respondent Type	93
5-7	Sites and Dates of Site Visits (in Order by VISN Number)	94
6-1	Survey Estimates of the Demographic Characteristics of the OEF/OIF/OND Veteran Population (population size about 4.1 million)	111
6-2	Survey Estimates of the Military Characteristics of the OEF/OIF/OND Veteran Population (population size about 4.1 million)	112
6-3	Percent of U.S. Armed Forces Veterans by Service Era	114
6-4	Six States with Largest Populations of OEF/OIF/OND Veterans	115
6-5	Percentage of OEF/OIF/OND Veterans Who Have a Mental Health Need by Screener and/or Received a Mental Health Diagnosis	116
6-6	Percentage of OEF/OIF/OND Veterans by Mental Health Need, Service Use, and Demographic Characteristics	118

6-7	Description of Service Use Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Use Mental Health Services	120
6-8	Percentage of OEF/OIF/OND Veterans by Mental Health Need, Perceived Need, and User Group	121
6-9	Perceived Need for Mental Health Care Among OEF/OIF/OND Veterans Who Screened Positive on a Mental Health Screener or Who Reported a Mental Health Diagnosis	123
6-10	Core Independent Variables Used in the Multivariate Analyses	124
6-11	Among All OEF/OIF/OND Veterans, Adjusted Odds Ratios of Having a Mental Health Care Need (statistically significant variables only)	125
6-12	Among All OEF/OIF/OND Veterans, Unadjusted Odds Ratios of Having a Perceived Mental Need by Mental Health Screener Scores (statistically significant variables only)	126
6-13	Among All OEF/OIF/OND Veterans, Adjusted Odds Ratios of Having a Perceived Mental Health Care Need (statistically significant variables only)	126
6-14	Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Use VA Services, the Percentage Who Strongly or Somewhat Agree with Reasons for Using VA Services	131
6-15	Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Do Not Use VA Services (Users of Non-VA Services and Nonusers of Any Mental Health Services), the Percentage Who Agreed with Various Reasons for Not Using Services	132
6-16	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Geographic Accessibility to the Nearest VA Facility That Offers Mental Health Services	133
6-17	Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Use VA Mental Health Services (an estimated 476,654 veterans), Attitudes on Access to Care and Availability of Mental Health Care	135
6-18	Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Used VA Mental Health Services Satisfaction with Availability of Mental Health Providers and Services at the VA	137
6-19	Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Used VA Mental Health Services by Opinion Rating with Aspects of VA Mental Health Care	138
6-20	Additional Independent Variables Included in the Regression Models	139
6-21	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That the Process of Obtaining Mental Health Care Through the VA Is Very/Somewhat Burdensome (statistically significant variables only)	140
6-22	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That It Is Never Easy to Get Appointments with a VA Mental Health Provider (statistically significant variables only)	140
6-23	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That They Are Never Able to Get VA Mental Health Care on Evenings, Weekends, or Holidays (statistically significant variables only)	141

6-24	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That They Are Somewhat/Very Dissatisfied with Period of Time from VA Appointment Request to Appointment Date (statistically significant variables only)	141
6-25	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Statistically Significant Predictors of Higher Satisfaction with Availability of Primary Care, General Mental Health, and Specialized Mental Health Services at the VA	142
6-26	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Statistically Significant Predictors of Higher Satisfaction with Availability of Mental Health Providers at the VA	142
6-27	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Statistically Significant Predictors of Higher Satisfaction with Availability of Mental Health Services at the VA (medication management, psychotherapy, group therapy, emergency services, case management)	142
6-28	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, the Percentage Reporting Obstacles to Using Mental Health Services	144
6-29	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, the Percentage Who Agree or Disagree with Statements About Getting Mental Health Care	145
6-30	Percentage of OEF/OIF/OND Veterans by Mental Health Need and User Group Who Are Somewhat Likely, Likely, and Very Likely to Use VA Mental Health Services in the Future	149
6-31	Among OEF/OIF/OND Veterans Who Are Not at All Likely to Use VA Mental Health Services in the Future Even If in Need, the Percentage Who Agree with Select Reasons by Use Groups	151
6-32	Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Not at All Likely to Use VA Mental Health Services in the Future Even If in Need, the Percentage Who Agree with Select Reasons	152
6-33	The Percentage of OEF/OIF/OND Veterans by the Importance of Select Changes the VA Could Make	152
6-34	The Percentage of OEF/OIF/OND Veterans by the Importance of Select Changes the VA Could Make, by User Group	153
6-35	The Percentage of OEF/OIF/OND Veterans by Their Likelihood of Mode of Future VA Mental Health Service Use	154
6-36	The Percentage of OEF/OIF/OND Veterans Within Each Age Category by Their Likelihood of Mode of Future VA Mental Health Service Use	155
6-37	Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Mental Health Service Use (statistically significant variables only)	156
6-38	Among OEF/OIF/OND Veterans Who Use Mental Health Care, the Adjusted Odds Ratios of Using the VA for Their Mental Health Care	157
7-1	MyVA 2016 Priorities	170
7-2	Types of Quality Assessment Questions	171

8-1	VHA Mental Health Position Vacancy Rates	176
8-2	VA Mental Health Training Slots by Profession, Expansion Since 2013/2014 and Current Total (as of May 31, 2017)	180
8-3	Psychotherapies in VA Dissemination and Implementation Model	183
8-4	Among OEF/OIF/OND Veterans Who Have Mental Health Needs, VA and Non-VA Users' Experiences of Mental Health Care	186
8-5	Among OEF/OIF/OND Veterans Who Have Mental Health Needs, Perceived Local Availability of Mental Health Services	187
8-6	Among OEF/OIF/OND Veterans Who Have Mental Health Needs, Perceived Local Availability of Mental Health Services, by User Group	188
8-7	Among OEF/OIF/OND Veterans Who Have Mental Health Needs, Reported Ability to See the Same Mental Health Provider, by User Group	188
8-8	Among OEF/OIF/OND Veterans Who Have Mental Health Needs, VA and Non-VA Users' Perceptions of the VA Facility	191
10-1	Experience of Care Among OEF/OIF/OND Veterans Who Use VA Mental Health Services	225
10-2	Statistically Significant Predictors of Mental Health Outcomes	226
11-1	National Evidence-Based Psychotherapy Dissemination and Implementation Model in the Department of Veterans Affairs	235
13-1	Among Men and Women OEF/OIF/OND Veterans Who Have Mental Health Needs and Do Not Use Mental Health Services, the Percentage Who Agreed with Various Reasons for Not Using Services	271
13-2	Among OEF/OIF/OND Veterans Who Have Mental Health Needs and Do Not Use Mental Health Services, the Percentage Who Agreed with Various Reasons for Not Using VA Services by Race/Ethnicity (selected races)	274

Abbreviations and Acronyms

A/PI	Asian/Pacific Islander
ACA	Patient Protection and Affordable Care Act
ACT	acceptance and commitment therapy
AI/AN	American Indian/Alaska Native
APPN	advanced practice psychiatric nurse
ATP	asynchronous telepsychiatry
AUDIT	Alcohol Use Disorder Identification Test
BHIP	Behavioral Health Interdisciplinary Program
CAPS	Clinician-Administered PTSD Scale
CBOC	community-based outpatient center
CBT	cognitive behavioral therapy
CCHT	care coordination home telehealth
CDC	Centers for Disease Control and Prevention
CIH	complementary and integrative health
CPG	clinical practice guideline
CPT	cognitive processing therapy
CVT	clinical videoconferencing technology
CWT	compensated work therapy
CWT-TR	compensated work therapy-transitional residence
DAST	Drug Abuse Screening Test
DBT	dialectical behavior therapy
DCHV	domiciliary care for homeless veterans

DoD	Department of Defense
Dom SA	domiciliary substance abuse
DRRI	Deployment Risk and Resilience Inventory
DRRTP	Domiciliary Residential Rehabilitation and Treatment Program
<i>DSM-5</i>	<i>Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition</i>
EBP	evidence-based practice
ECT	electroconvulsive therapy
ED	emergency department
EHR	electronic health record
FDA	Food and Drug Administration
FRCPP	Federal Recovery Coordination Program
FTE	full-time equivalent
FY	fiscal year
GAD	generalized anxiety disorder
GAO	Government Accountability Office
GPD	Grant and Per Diem
HCHV	Health Care for Homeless Veterans
HCRV	Health Care for Re-entry Veterans
HUD	Department of Housing and Urban Development
HUD-VASH	Department of Housing and Urban Development-Department of Veterans Affairs Supportive Housing
<i>ICD-9</i>	<i>International Classification of Diseases, Ninth Revision</i>
IOM	Institute of Medicine
IOP	intensive outpatient program
IPT	interpersonal therapy
IT	information technology
LCSW	licensed clinical social worker
LGBT	lesbian, gay, bisexual, transgender
LPC	licensed professional counselor
LRC	local recovery coordinator
MA	matched attention (health education control intervention)
MAOI	monoamine oxidase inhibitor
MDD	major depressive disorder
MFT	marriage and family therapist
MH RRTTP	Mental Health Residential Rehabilitation Treatment Program
MHEE	mental health education expansion
MHICM	mental health intensive case management
MHIS	Mental Health Information System
MHMS	Mental Health Management System

MIRECC	Mental Illness Research, Education, and Clinical Center
MSA	medical support assistant
MST	military sexual trauma
NCPTSD	National Center for Posttraumatic Stress Disorder
NDAA	National Defense Authorization Act
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NQF	National Quality Forum
NSDUH	National Survey on Drug Use and Health
OAT	opioid-agonist treatment
OEF	Operation Enduring Freedom
OHE	Office of Health Equity
OIF	Operation Iraqi Freedom
OMHSP	Office of Mental Health and Suicide Prevention
OND	Operation New Dawn
OPCC&CT	Office of Patient Centered Care and Cultural Transformation
OSI	Opioid Safety Initiative
OTH	other than honorable (discharge)
OTP	opioid treatment program
PACT	Patient Aligned Care Team
PAM	Patient Activation Measure
PC-PTSD	Primary Care PTSD screen
PC3	Patient-Centered Community Care
PCL(-M)	PTSD checklist (Military)
PCMH	patient-centered medical home
PC-MHI	primary care-mental health integration
PCP	primary care physician
PCT	present-centered therapy
PDSI	Psychotropic Drug Safety Initiative
PE	prolonged exposure (therapy)
PERC	Program Evaluation and Resource Center
PET	prolonged exposure therapy
PHQ	Patient Health Questionnaire
PII	personally identifiable information
PRRC	psychosocial rehabilitation and recovery center
PRRTP	Psychosocial Residential Rehabilitation Treatment Program
PST	problem-solving therapy
PTSD	posttraumatic stress disorder
QI	quality improvement
QUERI	Quality Enhancement Research Initiative
RANGE	Rural Access Network for Growth and Enhancement
RCT	randomized clinical trial

RRTP	residential rehabilitative treatment program
SAIL	Strategic Analytics for Improvement and Learning
SARRTP	Substance Abuse Residential Rehabilitative Treatment Program
SeRV-MH	Services for Returning Veterans-Mental Health
SIT	stress inoculation training
SMI	serious mental illness
SMITREC	Serious Mental Illness Research and Evaluation Center
SNRI	serotonin norepinephrine reuptake inhibitor
SoCRR	Social and Community Reintegration Research
SPAN	Suicide Prevention Applications Network (of the VA)
SSN	Social Security number
SSRI	selective serotonin reuptake inhibitor
SSVF	Supportive Services for Veteran Families
STEPS-UP	Stepped Enhancement of PTSD Services Using Primary Care
SUD	substance use disorder
TAP	Transition Assistance Program
TBI	traumatic brain injury
TCA	tricyclic antidepressant
TLC	time-limited care (coordination intervention)
TOP	Telemedicine Outreach for PTSD
UBHC	Unified Behavioral Health Center
VA	Department of Veterans Affairs
VABHS	VA Boston Healthcare System
VACO	Department of Veterans Affairs Central Office
VAMC	Department of Veterans Affairs medical center
VAR	veteran appointment request
VBA	Veterans Benefits Administration
VCCE	VA Medical Center Call Center Expansion (project)
VCL	Veterans Crisis Line
VCP	Veterans Choice Program
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VSE	VistA Scheduling Enhancements
WTU	warrior transition unit

Summary

The wars in Afghanistan and Iraq are among the longest sustained U.S. military operations in history. Operation Enduring Freedom (OEF)¹ is the name for the war in Afghanistan that began on October 7, 2001, and ended on December 31, 2014; and Operation Iraqi Freedom (OIF) is the name of the war in Iraq that began on March 20, 2003. On September 1, 2010, operations in Iraq continued under the name Operation New Dawn (OND).

In response to concerns about the health care experience of the approximately 4 million U.S. veterans who supported the wars in Iraq and Afghanistan and who may have mental health conditions, Congress passed Section 726 of the National Defense Authorization Act for fiscal year 2013; Section 726 required that the Department of Veterans Affairs (VA) enter into an agreement with the National Academies of Sciences, Engineering, and Medicine for a study that would assess veterans' ability to access mental health services at the VA and the quality of mental health services within the VA and would provide recommendations to improve problems with access and quality of services. The National Academies appointed the Committee to Evaluate the Department of Veterans Affairs Mental Health Services and assigned to it the following task:

A National Academies committee will comprehensively assess the quality, capacity, and access to mental health care services for veterans who served in the Armed Forces in OEF/OIF/OND. The committee will assess the spectrum of mental health services available across the entire VA. The scope of this assessment will include analysis not only of the quality and capacity of mental health care services within the VA, but also barriers faced by patients in utilizing those services. Types of evidence to be considered by the committee in its assessment include relevant scientific literature and other documents, interviews with VA mental health professionals, survey data to be provided by VA, and results

¹Operation Enduring Freedom officially refers to several operations around the world that were part of the global war on terror; however, in the context of this report, the focus is the operation in Afghanistan.

from surveys of veterans to be conducted independently by the committee. Site visits will be conducted to at least one VA medical center in each of 21 Veterans Integrated Service Networks (VISNs) across the country. In addition, the committee will hold an open meeting of experts to discuss the Secretary's plan for the development and implementation of performance metrics and staffing guidance. The committee will provide a final report with recommendations to the Secretary of the VA regarding overcoming barriers and improving access to mental health care in the VA, as well as increasing effectiveness and efficiency.

COMMITTEE'S APPROACH TO ITS CHARGE

The National Academies appointed a committee of 18 experts with extensive knowledge in a variety of relevant fields to carry out the study. The committee's approach to gathering information was threefold: reviewing the relevant published literature, conducting site visits, and developing and fielding a survey of OEF/OIF/OND veterans.² The committee sought input on the use of VA mental health services directly from veterans, veterans' families and caregivers, providers, and others at each of the 21 VISNs across the United States.³ The committee developed a survey that was administered to veterans to gather information on access to and the quality of VA mental health services and to determine why some veterans choose not to use VA mental health services. The major mental health conditions addressed in this report are posttraumatic stress disorder (PTSD), major depressive disorder, substance use disorder (SUD), and suicidal thoughts or behaviors.

To accomplish the part of the task that requires discussion of "the Secretary's plan for the development and implementation of performance metrics and staffing guidance," the committee held a public meeting on November 22, 2013, in Washington, D.C. During this meeting, VA officials presented their work related to the Secretary's plan, and the committee engaged in a discussion with them about it.

KEY FINDINGS

The committee's findings, derived from its survey of OEF/OIF/OND veterans, its site visits, and the literature, about the mental health needs of the OEF/OIF/OND population and the accessibility and quality of VA's mental health services are summarized below.

There is a substantial unmet need for mental health services in the OEF/OIF/OND population as identified using standard screeners of mental health conditions or veteran-reported diagnoses.

Approximately half of OEF/OIF/OND veterans surveyed by the committee who may have a need for mental health care services do not use VA or non-VA mental health care services. These results are consistent with several other studies of VA mental health care and demonstrate that a large proportion of veterans do not receive any treatment following diagnosis of PTSD, SUDs, or depression. Additionally, over half of veterans who have a mental health need do not perceive a need for mental health services, which suggests that some veterans do not seek care because they do not perceive that they personally have a need.

²See Appendix A for details on the survey methods.

³The VISNs were undergoing reorganization during the study period. The reorganization process is expected to be completed in 2018. Therefore, the VISN geographic coverage and numbers in this report may not correspond directly to the current VISN geographic coverage and numbers.

A number of VA health system factors may facilitate or be barriers to veterans' willingness to seek care.

- A lack of awareness about how to connect to the VA for mental health care is pervasive among OEF/OIF/OND veterans. Among OEF/OIF/OND veterans who have a mental health need and who have not sought VA mental health services, their main reasons for not doing so are that they do not know how to apply for VA mental health care benefits, they are unsure whether they are eligible, or they are unaware that the VA offers mental health care benefits.
- The process of accessing VA mental health services has been burdensome and unsatisfying for many OEF/OIF/OND veterans. The changes that OEF/OIF/OND veterans would like to see at the VA include, for example, making the process for scheduling appointments easier and improving customer service.
- From a systems perspective, the VA can facilitate access by ensuring VA leadership and management acumen are focused on aligning resources to veteran needs. Chronic workforce problems exist that have a significant impact on the care veterans receive. Complex eligibility criteria and confusing procedures to transition between the Department of Defense (DoD) and the VA are examples of policy-related barriers veterans encounter when seeking VA health care.

Many veterans' personal factors may facilitate or be barriers to veterans' willingness to seek care.

- OEF/OIF/OND veterans who have significant others (for example, family members and friends) who support their seeking treatment are much more likely to use VA health care services than veterans without such support.
- The use of the Internet or the phone to receive mental health care is acceptable to nearly half of OEF/OIF/OND veterans. Younger veterans tended to be more open to obtaining mental health care using the Internet.
- Transportation to and the convenience of VA medical facilities may pose challenges for many OEF/OIF/OND veterans who live far from VA facilities or who have chronic health conditions that make traveling long distances difficult.
- Additional barriers to seeking mental health care include employment concerns (spending time off from work, harm to their careers, denial of security clearance, and receiving less confidence and respect from co-workers and supervisors) and fears that discrimination could affect their ability to own guns, lead to a loss of contact with or custody their children, or lead to a loss of medical or disability benefits.

A majority of OEF/OIF/OND veterans who use the VA report positive aspects of and experiences with VA mental health services. These aspects of care include the availability of needed services, the privacy and confidentiality of medical records, the ease of using VA mental health care, the mental health care staff's skill and expertise, and the staff's courtesy and respect toward patients.

Many OEF/OIF/OND veterans receive high-quality mental health care from the VA; however, the VA's ability to deliver high-quality mental health care consistently to all veterans across facilities and subpopulations is an ongoing challenge. While evidence-based mental health services are available to veterans and are mostly concordant with clinical standards and policy mandates, there are significant gaps in care delivery. Problems with adequate staffing, physical infrastructure, and providing timely care appear to contribute to the variability in the VA's delivery of evidence-based mental health services. Burnout and job-related stress among VA mental health providers may contribute to high turnover.

The VA dedicates resources to and has a history of implementing innovative practices in the areas of patient care, health information technology, and quality monitoring.

- The VA has implemented innovative and evidence-based models of collaborative and integrated care to improve the delivery of mental health treatment.
- The VA has long-standing experience and expertise with electronic health records (EHRs), telehealth, virtual care technologies, and tele-mental health research and app development.
- The VA has many data systems tracking patient care; however, it has not yet operationalized a comprehensive system for collecting health outcome data with standardized patient-reported outcome measures.
- The VA is using some community-based mental health resources to serve veterans—for example, through the Choice Program and partnerships with organizations specializing in veterans’ services—to help alleviate the VA’s workforce and infrastructure problems. However, the VA does not collect adequate information about the approaches that it uses to ensure care coordination and quality monitoring for services the VA offers through contracts with community providers.

CONCLUSIONS AND RECOMMENDATIONS

As the nation’s largest provider of mental health care services, the VA health care system has tremendous mental health care expertise, many and diverse care delivery assets, and substantial training and research capabilities. It has a unique and unparalleled opportunity to address the mental health care needs of veterans in a truly integrated and strategic manner. Furthermore, the VA is positioned to inform and influence how mental health care services are provided more broadly in the United States. After reviewing extensive evidence, the committee concludes that the VA provides mental health care that is generally of comparable or superior quality to mental health care⁴ that is provided in the private and non-VA public sectors and that it has multiple centers of excellence in various aspects of mental health care. However, the accessibility and quality of mental health care services across the system varies by facility. For example, the committee found variability in staffing levels, types of providers, infrastructure resources, and veterans’ access, and in the types and consistency of treatments provided. It should be noted that problems with accessibility to and quality of mental health care are not unique to VA as similar problems also have been reported in the private and non-VA public sectors. Although many OEF/OIF/OND veterans are satisfied with VA’s mental health care, the committee believes that there are multiple opportunities for improving VA mental health care, especially with regard to increasing or facilitating access to care, providing care that is centered on the patient’s needs and expectations (that is, patient-centered care), and ensuring the consistency and predictability of readily accessible high-quality care being provided across the entire system.

To become a high-reliability provider of mental health care services, the VA needs to consistently and predictably provide readily accessible, high-quality mental health care at every facility for every veteran on every occasion.

Recommendation 16-1. The VA should set a goal of becoming a high-reliability provider of high-quality mental health care services throughout the VA health care system within 3 to 5 years. The VA should develop a comprehensive system-wide strategic plan for providing readily accessible, high-quality, integrated mental health care services to improve the overall

⁴Health care quality is a multidimensional concept. Chapter 7 of this report describes key concepts used by the committee in its evaluation of the evidence.

health and well-being of veterans. This plan should have a 3- to 5-year horizon and its implementation should be regularly monitored, reviewed, and updated, as needed, during that time.

The Veterans Health Administration (VHA), the sub-cabinet level agency within the VA that provides health care, needs to undertake a concerted, system-wide effort to organize and align its care delivery assets and processes of care toward this end, while concomitantly working with the Veterans Benefits Administration (VBA) and other elements of the VA to achieve this goal. To support these efforts, the VA should develop a comprehensive strategic plan or roadmap for reaching this objective. The strategic plan should address at least the following areas:

- a. Ways to enhance and facilitate timely access to patient-centered care and remove barriers to access. Broad input from patients using mental health care, as well as from staff, about service satisfaction and the barriers to providing patient-centered care should be solicited. Evaluate service-improvement programs such as MyVA as well as the many mental health service programs that the VA offers to learn whether these programs are achieving stated goals. Facilities should be identified that have high-service satisfaction, service effectiveness, increased access, and efficiency with the objective of calling out practices that might be adopted by other facilities.
- b. Workforce issues, including the recruitment, hiring, and retention of diverse staff; ensuring that VA health professionals are working at the top of their skills and expertise; and using health professional training programs to address staffing needs.
- c. The integration of the services of non-VA mental health care providers (for example, providers participating in VA community care programs such as the Veterans Choice Program) into the VA health care system. Independent evaluation of the utilization and quality of mental health services specifically provided by community care programs.
- d. Facility and other infrastructure needs, including facility physical plant issues that present barriers to access (for example, a lack of parking) or to the efficient and effective delivery of patient-centered care (for example, insufficient space for clinical evaluations and treatment).
- e. The integration of mental health care with both primary and non-mental health specialty care.
- f. The use of virtual care technologies, including telehealth and Internet-based technologies, to enhance access to and the delivery of mental health care.
- g. Performance management to advance the quality of mental health care.
- h. Incorporation of continuous quality improvement into all aspects of mental health care delivery.
- i. The deployment and use of evidence-based practices (EBPs).
 - i. Address barriers to providers' use of recommended guidelines.
 - ii. Review existing priority areas in clinical guidance and policy directives to confirm the evidentiary base underlying the practices recommended for these priorities and to identify clinical practices requiring reassessment, inclusion, or removal.
 - iii. Increase use of EBPs through efficient and scalable clinical training procedures.
- j. The system-wide review, modification, and standardization of policies and processes of care that facilitate and support access and the provision of high-quality mental health care.
- k. Ways to foster and nurture innovation in methods and processes of mental health care.
- l. Identifying and addressing research gaps and priorities.

The development of this strategic plan should be informed by the numerous studies and evaluations that have been conducted of VA health care in recent years. The VA should examine those reports to determine the reasons why some recommendations contained in them were judged to be appropriate

but were not implemented. As appropriate, those recommendations, along with the recommendations contained in this report, should be collated and incorporated into or otherwise addressed in the mental health care strategic plan (Recommendation 16-1).

Below, the committee makes additional recommendations that expand on some of the strategic plan areas listed above in Recommendation 16-1.

Access to Mental Health Care

The committee identified a number of ways OEF/OIF/OND veterans were having problems accessing mental health care from the VA. On the basis of those findings, the committee believes that the VA needs to do more to bring veterans who have unmet mental health care needs into the VA health care system. The lack of awareness about how to connect to the VA for mental health care demonstrates the need for awareness campaigns and effective dissemination of the mental health care opportunities, eligibility criteria, and services to help veterans understand how and where to access mental health care. The VA's recent initiative to offer emergency mental health care to veterans with other-than-honorable discharge status is an important step to improving access for veterans who may be in need of immediate help.

It may be particularly challenging to support veterans who are not ready to seek mental health services but who may want to obtain services at a later time. The VA should consider strategies for following up with veterans at regular intervals (for example, every 3 to 6 months for 2 to 3 years) following discharge from the military.

Recommendation 16-2. Via policy changes and other approaches, the VA should eliminate barriers to accessing mental health care experienced by OEF/OIF/OND veterans. The VA should adopt additional strategies to engage veterans, expand outreach efforts beyond the initial postdeployment period, and improve its transitional services as well as VBA and VHA processes with the goal of enhancing and facilitating access to mental health care.

Specific actions to be undertaken include the following:

- a. The VA, along with DoD, should re-examine the processes for transitioning services from DoD to the VA with the objective of enhancing the coordination and integration of services (including the determination of benefits and disability ratings and the transfer of health care records) and with the continuation of health care services. Possible improvements could include setting up initial VA health appointments as part of the Transition Assistance Program and providing liaisons who can be contacted to assist throughout the transition process and for a period of time afterward.
- b. The VA should examine the VHA and VBA interfaces with the goal of creating standard protocols (for example, for VBA compensation exams) to facilitate veteran access to services for physical and mental health conditions. The VA should view VBA compensation and pension examinations as an opportunity to engage veterans in ongoing care.
- c. The VA should use assertive outreach to bring veterans who have mental health care needs into the system. The U.S. Department of Housing and Urban Development—VA Supportive Housing program to address veteran homelessness is an example of how assertive outreach already has been effective for the VA.
- d. The VA should assess the availability and effectiveness of its peer specialist program and other support programs (for example, patient care navigators) at its facilities and develop appropriate implementation strategies if the assessment determines that these resources should be augmented.

Mental health care services in the private and non-VA public sectors are not adequate to meet the current demand for such services in many communities across the United States. There are, however, communities where resources are sufficient to do more and where these resources could be used to meet veterans' needs. These resources generally provide ancillary and complementary services to support mental health treatment obtained from VA providers and from community care providers such as Veterans Choice Program providers.

Recommendation 16-3. The VA should examine how its facilities interface with community resources and compile an inventory of VA–community collaborations with the objective of identifying exemplary or model collaborations and best practices for forging community partnerships.

Equitable Care

Demographic data show that the OEF/OIF/OND veteran population is more racially and ethnically diverse and has more women than other veteran cohorts. Differences exist in mental health diagnosis and treatment patterns across races and ethnicities among veterans receiving care at the VA. The reasons are not clear, but some researchers posit that the difference in diagnosis patterns may be related to provider characteristics, doctor–patient communication, patient participation, or the lack of cultural sensitivity in diagnostic criteria for mental health conditions. The rates of using mental health care services also differ across different demographic groups. Women veterans who served in OEF/OIF have a higher need for mental health care compared to women veterans from previous conflicts, but also are significantly more likely to believe that they are not entitled or eligible for VA mental health services compared to men veterans who served in OEF/OIF/OND. The committee heard from women veterans during the site visits that VA staff at health care facilities sometimes assume that they are wives accompanying their husbands and not themselves veterans. They also are at times uncomfortable in VA clinic waiting rooms because they get unwanted sexual attention, which can be particularly unsettling for women veterans who have experienced military sexual trauma. Research on homeless veterans shows that they are more likely to defer or delay mental health care than housed veterans even though they have a greater need for services. Although the research is still emerging, lesbian, gay, and bisexual veterans may use mental health services at a lower rate than veterans who are not lesbian, gay, or bisexual. Transgendered veterans may be more likely to have a mental health diagnosis than non-transgendered veterans. While interventions to reduce mental health stigma are emerging, stigma remains a barrier to seeking mental health care among veterans.

Recommendation 16-4. The VA should take steps to ensure that its diverse patient population receives readily accessible, high-quality, integrated mental health care services. Areas to focus on are service delivery, workforce issues, and resource allocation (including the logistics of care delivery and the structure of clinical space).

Specific actions should include the following:

- a. Ensuring that clinical environments are supportive of quality care for racial and ethnic minorities by ensuring that the racial and ethnic diversity among clinical and administrative staff reflects the diversity of the patient population, identifying and addressing discrimination, and monitoring and addressing health care disparities.
- b. Ensuring that clinical environments are supportive of quality care for women veterans, efforts that should include the provision of gender-appropriate providers and intolerance of harassment of women veterans by either staff or fellow patients.

- c. Assessing the needs of lesbian, gay, bisexual, and transgender veterans and providing an appropriately welcoming and supportive environment.
- d. Assessing the needs and barriers to care for rural-dwelling veterans and ensuring that the demand for care in rural locations is met.
- e. Identifying the homeless veterans who are being served and adjusting clinical services to provide them quality care and facilitate domiciliary services when appropriate.
- f. Ensuring that both VA and community care providers understand military culture.

Human Resources and Capital Assets

Some VA facilities are understaffed and have inadequate clinical and office space to support the efficient delivery of care or patient-centered care. As a result of these infrastructure problems, VA mental health providers sometimes cannot meet the demand for mental health care services and providers “burn out,” which can interfere with the quality of the relationship between the veteran and provider. Primary care–mental health integration is one strategy that the VA has employed to realign its human resources to reduce service fragmentation and improve patient care. While the VA needs to ensure that its existing mental health care resources are allocated in a manner that optimizes the likelihood that they are effectively and efficiently used, additional staff and clinical space are needed at some facilities. The committee recognizes that increasing the VA’s mental health workforce is particularly challenging, given the nationwide shortage of mental health care providers, and, consequently, it believes that the VA should explore ways it can use its educational and training infrastructure to address its workforce needs. Space shortages appear to be more of a concern at VA medical centers (VAMCs) and VA community-based outpatient clinics (CBOCs) than at Vet Centers. The lack of adequate space and workforce appears to be a prominent reason that staff at some VA facilities sometimes cannot provide EBPs.

Veterans sometimes experience a lack of continuity in their mental health care because of the turnover of providers and, especially, providers in training. The training of mental health care providers at VA facilities is highly desirable, but VA should make an effort to better bridge the transition from one trainee therapist to another. The VA should raise provider awareness of the issues of continuity of care from the veteran’s perspective.

The VA has a variety of incentive programs to help bolster recruiting and retention. Title 38 U.S.C. positions, for example, can be filled by appointing a former or current VA trainee without formally posting the position and going through the full recruitment process. At present, the only types of mental health care providers included under Title 38 are physicians, psychologists, nurses, and physician assistants. Reclassifying all types of mental health care workers, including substance use counselors, under Title 38 might help in addressing some of the mental health care workforce problems.

The committee heard repeatedly during its site visits that the VA’s human resources management process is cumbersome and onerous. There was broad support for improving the human resource management process, specifically with regard to the recruitment, onboarding, and retention of both care provider and support staff.

Many veterans reported that they highly valued the care that they received at Vet Centers and that they preferred to go to Vet Centers for their mental health care instead of VAMCs or CBOCs. Some of the reasons that veterans offered for preferring using the Vet Centers were the availability of marital and family therapies, a less formal atmosphere, seemingly enhanced confidentiality, shorter wait times, more flexible hours of operation, and the Vet Center’s emphasis on counseling services rather than the

use of medications. Peer support is typically readily available as well. The VA should explore how the Vet Center program could be enhanced or, alternatively, how the characteristics of the Vet Centers that appeal to veterans could be replicated at CBOCs and VAMCs.

Recommendation 16-5. The VA should evaluate whether all types of mental health care workers could be brought under Title 38 U.S.C. and if this might alleviate some workforce shortages. If the assessment indicates that this reclassification would have a salutary effect, then the VA should pursue the necessary solutions.

Recommendation 16-6. The VA should conduct a broad examination of its various types of facilities to assess how it could realign its human resources and capital assets to better meet the demand for mental health care services. Adequate clinical and office space and staffing are necessary to reduce wait times, lessen administrative and clerical burden on clinicians, improve the fidelity of treatment, and increase adherence to clinical practice guidelines.

Health Technology

The VA is using health technology, including telemedicine (the use of electronic information and communication technologies to provide health care) and mHealth (mobile health apps), to increase access to mental health care and to treat and help manage a variety of mental health conditions, including PTSD, depression, and SUD. While telemedicine infrastructure has been widely rolled out, its actual use across the VA is highly variable and seems to be dependent on local champions and use cases, rather than on directed strategic approaches. The VA has been steadily increasing funding for telemedicine and has expanded telemedicine services throughout its health system. A growing body of research supports the use of telemedicine as a way of effectively delivering various health care services and, especially, mental health care. The use of virtual care technologies for mental health care is not yet fully integrated as a part of standard clinical care at the VA. Several barriers to access to care, such as long distances to VA clinics and VA workforce shortages, could be addressed by using tele-mental health for clinical services.

While the growth of tele-mental health indicates the VA's commitment to using technology to improve access to mental health care, research gaps in the field remain, as do implementation and attitudinal barriers in the VA. Long-term outcome studies are needed on the use of tele-mental health for conditions other than PTSD or depression. Further research also is needed on the use of tele-mental health for evidence-based therapies—for example, therapies delivered in the home or in mobile settings—and for technologies other than video conferencing, such as mHealth smartphone applications. In another use of health technology, research is needed to better understand how to optimize VA information systems for comprehensive surveillance of suicide attempts among VA health service users. To further maximize the benefits of health technology, the VA needs greater buy-in and commitment from national and local VA leaders, providers, and veterans in order to enable telehealth modalities to be a standard part of routine care, when appropriate. Coordinated training efforts at the provider and leadership level could improve buy-in and successful adoption.

Recommendation 16-7. The VA should leverage its existing health technology infrastructure and internationally recognized expertise in telehealth and virtual care to substantially expand the scale and quality of its tele-mental health and technology-supported mental health services for clinical, research, and educational purposes.

Specific actions should include the following:

- a. Collaborating with partners, such as the DoD and academic medical centers, to increase and support strategic research into the best use of these information technologies to support the mission of the VA and the care of veterans nationally, with a focus on methods used in dissemination and implementation research.
- b. Substantially increasing and scaling the use of clinical information technologies for direct mental health care (for example, video, telephony, e-consults, messaging, apps, virtual reality, and gamification), and integrating them as a routine choice as part of stepped care for veterans across the full range of VA mental health and primary care programs.
- c. Training leadership at all levels throughout the VA on how to promote and incentivize the increasing use of health information technologies in every VA area and on how to capture and copy examples of excellent implementation and innovation found in other VA regions.
- d. Increasingly employing qualified providers as a virtual network of experts to work across the country, rather than primarily in a single region, and substantially increasing the use of such providers for meeting both training and service needs and capacities created by workforce shortages in some VA regions.
- e. Making work conditions more flexible for many clinicians to enable them to increasingly work in a hybrid manner—both in person and online—and to work both within their own work regions and within other VA regions so that mental health care becomes available in a virtual manner, anytime, anywhere, especially direct to veterans in their homes. For workload and cost accounting purposes, providers will need to receive “credit” for work provided outside their own regions or networks.
- f. Ensuring that the current VA EHR system is interoperable with DoD’s EHR and other commercially available EHRs to allow the passage of patient information (both physical health and mental health information) seamlessly and rapidly, thereby making sure that complete information is available to providers when and where it is needed.

Quality Management

VA has many key initiatives aimed at measuring system performance to improve mental health care access and quality. For example, current efforts by the VA include the collection and use of more mental health care measures, the use of facility-level and system-level performance data to engage VA management in mental health programming and improvement, and programs (such as the Quality Enhancement Research Initiative and the Diffusion of Excellence program) to identify and disseminate best practices. The VA’s programs to train clinicians on evidence-based mental health treatments and to promote the use of those treatments by clinicians are other ways the VA has increased its capacity to provide evidence-based care.

The VA uses a number of quality management strategies, programs, and systems, but questions remain about how well these efforts are driving the system to be more patient centered and value driven while also improving access to care and quality of care. Problems with provision of services suggest that the VA does not appear to be adequately generating and using data to improve its mental health care system. More attention is needed to identify sources of variation across VISNs and VAMCs and on using performance data about the various access and quality domains to establish targeted quality improvement efforts.

Given the large numbers of veterans who do not seek mental health care and the significant percentages of veterans who are not receiving mental health treatments that meet recommended dosages, frequency, or follow-up, particular attention should be placed on measuring and monitoring the delivery of evidence-based care, patient engagement in care, and continuity of care. These areas of performance measurement should address veterans who receive care within the VA health system and veterans who receive care through VA community care programs, such as the Veterans Choice Program.

The VA needs a better and a broader array of quality measures to improve the interface between general medicine and mental health. Few indicators have been implemented at the VA or nationally that specifically assess the quality of mental and general health care integration. The quality reported by subgroups (for example, the type of mental health condition and the specific demographics) can support targeted interventions.

None of the VA's data systems for quality management reviewed by the committee collect and use patient outcome data, which is a significant barrier to quality improvement. Patient outcome data are the necessary standard against which to judge effectiveness of VA facilities' quality improvement efforts. Another priority area is methods for measuring and improving the delivery of psychosocial interventions. The preponderance of mental health measures focuses on medication management for the treatment of mental health conditions. However, cognitive behavioral therapy is the first-line EBP for depressive and anxiety disorders. The committee found that the VA has started collecting data on the delivery of evidence-based psychotherapy using electronic clinical progress templates incorporated into veterans' health records.

Finally, to become a high-reliability mental health care system, the VA has to develop a more robust quality management infrastructure that will support the continuous evaluation of access, quality of care, and outcomes, among other things. This requires a much more broadly based portfolio of performance measures than exists today. And while the development and use of mental health performance measures has gained momentum in recent years, and while the VA has been an active participant in this arena, the committee believes that the VA should take a lead role nationally in measuring the quality of mental health care. The VA health care system can serve as a testing ground for measurement innovation that can both benefit veterans and the U.S. population broadly. And since a growing number of veterans are receiving care in the non-VA public and private health care sectors, the VA has a vested interest in establishing standardized performance measures that can be used to assess and improve the quality of care.

Recommendation 16-8. The VA should take a lead role nationally in advancing quality management in mental health care. Toward this end, the VA should take steps to accelerate the development and use of standardized performance measures to assess and improve care for mental health conditions in veterans. It should engage with performance measure development organizations to develop a robust portfolio of mental health care performance measures. As part of its comprehensive mental health care strategic plan, the VA should articulate how performance measures will be rolled out and implemented, maintained, and used for quality improvement and research purposes, and otherwise managed.

1

Introduction

The wars in Afghanistan and Iraq have been among the longest-ever sustained U.S. military operations. Operation Enduring Freedom (OEF)¹ is the name for the war in Afghanistan that began on October 7, 2001, and ended on December 31, 2014, and Operation Iraqi Freedom (OIF) is the name of the war in Iraq that began on March 20, 2003. Since September 1, 2010, the continuing operations in Iraq have been referred to as Operation New Dawn (OND).

In contrast with previous wars, the all-volunteer military supporting OEF/OIF/OND has experienced numerous deployments of individual service members and has seen increased deployments of women, parents of young children, and Reserve and National Guard troops (IOM, 2013). In some cases the deployed have been subject to longer deployments and shorter times at home between deployments than in previous wars. Military families sometimes endure adverse consequences of deployments, including health problems, family violence, and economic burdens (IOM, 2013).

Numerous reports in the popular press have made the public aware of issues indicating that military personnel have returned home with posttraumatic stress disorder (PTSD) and other mental health diagnoses, such as major depressive disorder, anxiety, substance use disorder, and suicidal ideation. As early as 2004, it was estimated that over one-fourth of troops returning from OEF and OIF were suffering from mental health disorders (Hoge et al., 2004). Later estimates suggested that one-fifth of the troops reported symptoms of PTSD or depression and about the same fraction experienced a probable traumatic brain injury (TBI) during deployment (Tanielian and Jaycox, 2008). RAND reports note that a full one-third of returning OEF and OIF service members reported symptoms of mental health or cognitive problems (Hosek, 2011; Tanielian and Jaycox, 2008). RAND also reports that 18.5 percent of a representative sample of returning service members met the diagnostic criteria for PTSD or depression, 19.5 percent reported a probable TBI during deployment, and 7 percent met the criteria for both a

¹Operation Enduring Freedom officially refers to several operations around the world that were part of the Global War on Terror; however, in the context of this report, the focus is the operation in Afghanistan.

mental health problem and a probable TBI (Tanielian and Jaycox, 2008). In addition, the prevalence of substance use disorder among OEF/OIF/OND veterans is greater than in the general population (Larson et al., 2012). Details on the prevalence of mental health conditions, including substance use disorder, in OEF/OIF/OND veterans can be found in Chapter 4.

The influx of returning OEF/OIF/OND veterans in need of treatment for mental health conditions has placed increased demands on the Veterans Health Administration (VHA), the sub-cabinet level agency within the Department of Veterans Affairs (VA) that manages the VA's integrated health care system, and there have been reports of delayed care, inadequate care, and other problems with accessing and obtaining timely and high-quality mental health care for some OEF/OIF/OND veterans. Problems with access to and the quality of VHA mental health care services were identified in several previous investigations. For example, concerns were raised about how long veterans had to wait to receive appointments at VHA health facilities, including mental health appointments (Commission on Care, 2016; GAO, 2012; VA, 2014; VA Office of Inspector General, 2012); about the implementation of the *Uniformed Mental Health Services Handbook*, which defines minimal mental health clinical requirements for VHA health facilities (VA Office of Inspector General, 2010); about VHA residential mental health care facilities (VA Office of Inspector General, 2009); and about postdischarge follow-up mental health care, especially for veterans at risk of suicide (VA Office of Inspector General, 2013). As the present study was ongoing, investigations by governmental oversight bodies (for example, the VA Office of Inspector General and the Government Accountability Office) and media reports were released that brought to the public's attention problems with the VHA health care system, in some cases with the agency's mental health clinical services. In this report, the committee does not react to individual incidents or "scandals"; rather, it has sought to conduct a comprehensive and unbiased review of evidence on the overall performance of the VHA's mental health care services and to make recommendations for improving those services.

It should be noted that problems in accessing and obtaining high-quality mental health care are not unique to the VHA. Similar problems have been reported in the private health care sector as well (for example, The Commonwealth Fund, 2013; Merritt Hawkins, 2014; O'Hanlon et al., 2017).

Not all veterans are eligible for health care through the VHA. Veterans may be eligible to receive health care through the VHA if (1) they served in the active military service and left the service under any condition other than dishonorable or (2) they served or are currently serving in the Reserves or National Guard and they were called to active duty by a federal order and completed the full period for which they were called or ordered to active duty (VA, 2015). As detailed in Chapter 6, even if veterans meet the broad eligibility requirements noted above, they may not qualify to receive health care through the VHA. In addition, some veterans who qualify for health care through the VHA may choose not to use VHA services; for example, veterans who have health insurance through their employers may seek health care services from private providers. Veterans who served in a combat theater after November 11, 1998, and were discharged from active duty on or after January 28, 2003, are eligible for comprehensive VHA health care services for 5 years following their discharge. Veterans in this group would include veterans serving in combat theaters in support of OEF/OIF/OND (unless they discharged before January 28, 2003). After 5 years, these veterans are assigned to a priority group based on their income and degree of disability due to their service-related condition at that time (IOM, 2014). Combat veterans who did not enroll within the 5-year window of eligibility and were discharged from service between January 1, 2009, and January 1, 2011, were granted 1 additional year of eligibility under the Clay Hunt Suicide Prevention for American Veterans Act.²

²Public Law 114-2.

COMMITTEE'S CHARGE

In response to concerns about the health care experience of the approximately 4 million U.S. veterans who supported the wars in Iraq and Afghanistan and who may have mental health conditions, Congress passed Section 726 of the National Defense Authorization Act (NDAA) for fiscal year (FY) 2013; Section 726 required that the VA enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (the National Academies) for a study that would assess veterans' ability to access mental health services at the VHA as well as the quality of mental health services within the VHA and to provide recommendations to address problems with access and quality of services. The National Academies assembled the Committee to Evaluate the Department of Veterans Affairs Mental Health Services and assigned to it the following task:

A National Academies of Sciences, Engineering, and Medicine committee will comprehensively assess the quality, capacity, and access to mental health care services for veterans who served in the Armed Forces in OEF/OIF/OND. The committee will assess the spectrum of mental health services available across the entire VA. The scope of this assessment will include analysis not only of the quality and capacity of mental health care services within the VHA, but also barriers faced by patients in utilizing those services. Types of evidence to be considered by the committee in its assessment include relevant scientific literature and other documents, interviews with VHA mental health professionals, survey data to be provided by VHA, and results from surveys of veterans to be conducted independently by the committee. Site visits will be conducted to at least one VA medical center in each of 21 Veterans Integrated Service Networks across the country. In addition, the committee will hold an open meeting of experts to discuss the Secretary's plan for the development and implementation of performance metrics and staffing guidance. The committee will provide a final report with recommendations to the Secretary of the VA regarding overcoming barriers and improving access to mental health care in the VA as well as increasing effectiveness and efficiency.

COMMITTEE'S APPROACH TO ITS CHARGE

The National Academies appointed a committee of 18 experts to carry out the study. The committee members have expertise in fields such as epidemiology, biostatistics, survey design and data analysis, health services research, clinical medicine, psychiatry, psychology, nursing, sociology, and social work. Furthermore, several committee members had previously been employed at the VHA as providers of mental health care, one committee member is a former official of the VHA, and several are former active-duty military members.

The VHA is a large, complex, and dynamic health system, which made the committee's work particularly challenging. To meet the challenge, the committee took a three-part approach to gathering information: reviewing the literature, conducting site visits, and developing and fielding a survey of OEF/OIF/OND veterans. With a focus on OEF/OIF/OND veterans, the literature search included identifying and reviewing data in the peer-reviewed literature; reviewing government reports and testimony before Congress; reviewing recent National Academies reports on PTSD and physiological, psychological, and psychosocial effects of deployment-related stress; and gathering information directly from VA researchers and officials. Consistent with the statement of task, the committee uses the terms "mental health" and "mental health conditions" to encompass diagnoses such as PTSD, major depressive disorder, and substance use disorders. Similarly, the terms "mental health services" and "mental health treatments" include health care addressing this range of conditions. The committee was mindful of the practical consideration that research studies and other documents cited in this report often use the term "behavioral health" to refer specifically to alcohol and drug abuse.

In its attempts to understand the mental health needs of OEF/OIF/OND veterans, veterans' access to care, and the quality of the VHA programs, the committee conducted extensive searches of the peer-reviewed literature and considered about 3,000 articles. It also relied on the gray literature, including publications produced by government, business, and industry; conference proceedings; and abstracts presented at conferences. Specifically, the committee members reviewed numerous reports of the Government Accountability Office, the inspectors general of VA and the Department of Defense, and the Congressional Research Service.

The committee also sought input on the use of VHA mental health services directly from veterans, veterans' families and caregivers, providers, and others at each of the 21 Veterans Integrated Service Networks across the United States. To assist with the organization of the site visits, data collection, and data analysis, the committee retained the services of Westat, an independent research corporation. All 21 site visits were conducted between February 2015 and November 2015. In addition to the site visits, the committee held four public sessions in Washington, DC, to gather information from invited speakers and members of the public.

Finally, the committee developed a survey that was administered to OEF/OIF/OND veterans in order to gather information on access to and the quality of VHA mental health services and to determine why some veterans choose not to use VHA mental health services. Westat was subcontracted to assist with this task as well. The methods used to carry out the site visits and the survey are detailed in Chapter 5. The survey of veterans, which includes responses from both eligible individuals who have chosen not to use VHA mental health services and individuals who do use VHA mental health services, is unique both in scope and size and provides new and valuable insights about access. Although Section 726 of the NDAA FY 2013 specifies only that the committee conduct a survey of non-users of VHA mental health services, the committee members decided to also include users of VHA mental health services as a comparison group. Results from the data analyses are presented in Chapters 6 and 8–15.

To accomplish the part of the statement of task that requires discussion of “the Secretary’s plan for the development and implementation of performance metrics and staffing guidance,” the committee held a public meeting on November 22, 2013, in Washington, D.C. At that meeting, VHA officials presented information on their work on measures related to capacity, timeliness, evidence-based treatments, and veterans’ satisfaction with VHA mental health services and also on the VHA’s staffing model. The committee engaged in a discussion with the VHA officials in attendance on the information presented during the meeting. That information is not summarized in this report; however, Chapter 15 contains additional information about quality measurement at VHA.

ORGANIZATION OF THE REPORT

This report is organized into 16 chapters. Chapter 2 provides an overview of the structure of the VHA; the chapter also discusses how the VHA fits into the U.S. health care landscape. Chapter 3 provides an overview of mental health services provided by the VHA and its research and evaluation programs that support clinical operations. Chapter 4 summarizes how select mental health conditions are clinically managed in the VHA. Chapter 5 details the committee’s methods for data collection, which consisted of a survey, site visits, and a comprehensive literature review, as well as its methods for data analysis. Chapter 6 describes the need for and use of VHA health care services, including mental health care services, by veterans. It includes the analyses of the committee’s survey of veterans who use and do not use the VHA for mental health services; the chapter includes descriptions of problems associated with accessing VHA mental health care services. Chapter 7 provides an introduction to the eight dimensions of health care quality (workforce and infrastructure, timely mental health care, patient-centered

mental health care, effective mental health care, efficient mental health care service delivery, equitable mental health care, health technology for mental health care, and quality improvement) around which the committee's evaluation is organized. Chapters 8–15 summarize information from the survey, site visits, and literature on these dimensions. Chapter 16 contains the committee's findings, conclusions, and recommendations. The report has two appendixes. Appendix A contains the survey instrument and other supporting documents related to the survey, and Appendix B contains the site visit questionnaires and NVivo codes.

REFERENCES

- Commission on Care. 2016. *Final report of the Commission on Care*. Washington, DC: Commission on Care.
- The Commonwealth Fund. 2013. *International profiles of health care systems, 2013*. New York: The Commonwealth Fund.
- GAO (Government Accountability Office). 2012. *VA health care: Reliability of reported outpatient medical appointment wait times and scheduling oversight need improvement*. Washington, DC: Government Accountability Office.
- Hoge, C. W., K. Wright, P. Bliese, A. Adler, and J. Thomas. 2004. *Prevalence and screening of mental health problems among U.S. combat soldiers pre- and post-deployment*. Silver Spring, MD: Walter Reed Army Institute of Research.
- Hosek, J. 2011. *How is deployment to Iraq and Afghanistan affecting U.S. service members and their families?* Santa Monica, CA: RAND Corporation.
- IOM (Institute of Medicine). 2013. *Returning home from Iraq and Afghanistan: Assessment of readjustment needs of veterans, service members, and their families*. Washington, DC: The National Academies Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- Larson, M. J., N. R. Wooten, R. S. Adams, and E. L. Merrick. 2012. Military combat deployments and substance use: Review and future directions. *Journal of Social Work Practice in the Addictions* 12(1):6–27.
- Merritt Hawkins. 2014. *Physician appointment wait times and Medicaid and Medicare acceptance rates*. Irving, TX: Merritt Hawkins.
- O'Hanlon, C., C. Huang, E. Sloss, R. Anhang Price, P. Hussey, C. Farmer, and C. Gidengil. 2017. Comparing VA and non-VA quality of care: A systematic review. *Journal of General Internal Medicine* 32(1):105–121.
- Tanielian, T. L., and L. H. Jaycox. 2008. *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: RAND Corporation.
- VA (Department of Veterans Affairs). 2014. *VA access audit and wait times fact sheet*. Washington, DC: Department of Veterans Affairs.
- VA. 2015. *Health benefits*. <http://www.va.gov/HEALTHBENEFITS/apply/veterans.asp> (accessed October 23, 2015).
- VA Office of Inspector General. 2009. *Healthcare inspection: Review of Veterans Health Administration residential mental health care facilities*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2010. *Healthcare inspection progress in implementing the Veterans Health Administration's Uniform Mental Health Services Handbook*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2012. *Veterans Health Administration review of veterans' access to mental health care*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2013. *Evaluation of mental health treatment continuity at Veterans Health Administration facilities*. Washington, DC: Department of Veterans Affairs.

2

The Veterans Health Administration

This chapter provides an overview of the Veterans Health Administration (VHA) and how it fits into the broader U.S. health care landscape. The VHA is the sub-cabinet level agency within the Department of Veterans Affairs (VA) that provides health care, including mental health care, to millions of veterans. The chapter begins with an explanation of how veterans enter the VHA health care system. It next describes the general organizational structure of the VA and the VHA. Specific mental health services offered at the VHA are detailed in Chapter 3. The chapter concludes with a brief discussion of other health care sectors and how they generally compare to VHA mental health care services.

TRANSITION FROM ACTIVE DUTY TO VETERAN STATUS

If active-duty service members wish to receive health care services after they leave the military, they must seek private health coverage or non-VHA public health coverage (for example, through Medicaid or community health centers) or else enroll in the VA health care system. Transitioning to the VA system requires successfully completing several critical steps or “handoffs” from Department of Defense (DoD)-based providers and facilities to VA providers and facilities: enrollment in the VA system, identification of and enrollment in programs, and the successful transfer of medical records. Additionally, some reserve members might receive care from both DoD and the VHA. Unfortunately, although both DoD and the VHA use electronic health records, the two systems are not yet fully interoperable.

In general, transition points pose risks to both access to and the quality of care, including the disruption of relationships with care providers and treatment interruptions. Furthermore, the VA requires consent for medical records to be transferred from DoD to the VHA for Reserve members, creating another potentially problematic transition point. The Institute of Medicine (IOM, 2014) found that moving from DoD to VHA systems may affect access to services by disrupting the continuity of care. Common problems that may occur during the transition from DoD to the VHA include treatment interruptions and switching to new providers who may take time to become familiar with a patient’s history.

DoD and the VA have both developed programs designed to bridge gaps in care and to decrease lack of coordination between the two systems. The joint DoD and VA in Transition program serves service members receiving mental health care who are transitioning from active duty to veteran status. In this program, transition support coaches provide patient education, answer technical mental health questions, and help connect patients with appropriate providers (IOM, 2014). The Federal Recovery Coordination Program (FRCP) was jointly developed by DoD and the VA to coordinate care for severely wounded service members and veterans. It was designed to complement existing programs such as DoD's Recovery Coordination Program, the Wounded Warrior Program operated by the individual military services,¹ Army warrior transition units, the VA's Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) Care Management Program, the VA's Spinal Cord Injury Disorders Program, and the VA Polytrauma System of Care. FRCP coordinators are assigned to link multiple case managers, oversee service members' enrollment in programs, and serve as the single point of contact for injured service members and their families (CBO, 2011; Yano et al., 2003).

A major limitation and concern of the FRCP is the inability to share information across DoD and the VA and, more broadly, the general incompatibility among systems used by different programs. Service members are typically enrolled in multiple programs—in September 2010, 84 percent of FRCP enrollees were also enrolled in a military service wounded warrior program. This limits the coordination of services, increases the duplications of services, and may result in enrollee confusion. Accordingly, FRCP is making efforts to address those limitations and improve information sharing; however, as noted by the Government Accountability Office (GAO, 2011), it appears that increased efforts to improve data exchange between the two systems and interdepartmental coordination are needed.

Furthermore, to help ease the transition from DoD to the VA, VHA liaisons from the Office of Care Management and Social Work Services and the Office of Interagency Health Affairs help make appointments and coordinate continued care for transitioning service members. Similarly, OEF, OIF, and Operation New Dawn (OND) Transition and Care Management Teams are present in all VHA facilities to help veterans access and coordinate care. These teams receive lists with the contact information of newly separated veterans in their catchment areas and are encouraged to reach out to them (IOM, 2014).

ELIGIBILITY AND ENROLLMENT

Not all veterans are eligible for health care through the VA. Veterans may be eligible for health care services if they

- Served in the active military service and were separated under any condition other than dishonorable.
- Served in the Reserves or National Guard, or are currently serving, and were called to active duty by a federal order and completed the full period for which they were called or ordered to active duty (VA, 2015).

There are minimum duty requirements for eligibility, but a number of exceptions to these requirements exist. Therefore, veterans must apply for health care services to determine their eligibility (VA, 2015). Chapter 6 includes detailed information on which veterans are eligible to use VA health services.

¹The Wounded Warrior Program includes the Army Wounded Warrior Program, the Marine Wounded Warrior Regiment, Navy Safe Harbor, the Air Force Warrior and Survivors Care Program, and the Special Operations Command's Care Coalition.

Once a veteran is determined to be eligible for VHA health care, the veteran is assigned an enrollment priority group (see Chapter 6 for a list of priority groups). Priority groups are used because Congress annually allocates funds for the VA and the agency needs a way to prioritize, given the allotted funds, who should receive health care services. More than 9 million veterans of all eras are enrolled to receive health care through the VHA and are assigned to a priority group.²

Veterans who served in a combat theater after November 11, 1998, and were discharged from active duty on or after January 28, 2003, are eligible for comprehensive VHA health care services for 5 years following their discharge. Veterans in this group would include veterans serving in combat theaters in support of OEF/OIF/OND (unless they discharged before January 28, 2003). After 5 years, these veterans are assigned to a priority group based on their income and the degree of disability due to their service-related condition at that time (IOM, 2014). Combat veterans who did not enroll within the 5-year window of eligibility and were discharged from service between January 1, 2009, and January 1, 2011, were granted 1 additional year of eligibility under the Clay Hunt Suicide Prevention for American Veterans Act.³

THE VETERANS HEALTH ADMINISTRATION ORGANIZATIONAL STRUCTURE

The VA is the second largest U.S. federal agency on the basis of the number of employees, following the Department of Defense. The VA has three administrations—the VHA, the Veterans Benefits Administration, and the National Cemetery Administration. The VHA is responsible for providing health care services to the eligible veteran population (see above for eligibility requirements). The VHA has many components that provide centralized policy direction and operational support to the field facilities. It provides routine and specialized clinical services, conducts health research, and offers one of the largest professional health training programs in the world (VA, 2010a).

The VA's Office of Mental Health and Suicide Prevention, part of the VA's central office, is responsible for providing clinical policies and national guidance for best practices in mental health and suicide prevention programs. It also supports implementation of the policies and best practices.⁴ Other VA divisions, such as Health Informatics, Nursing, and Homelessness, also address mental health issues. The VHA has divided the United States and its territories into 21 regional units, or Veterans Integrated Service Networks (VISNs), to manage VHA health service delivery within defined geographic service areas. The VHA is currently in the process of realigning its VISNs. In consultation with the VA's central office, VISN leadership provides guidance and oversight to VHA health care facilities on capital asset management, clinical quality management, assessment and reviews strategy, safety and health, and environmental and engineering programs (VA Office of Inspector General, 2012). Each VISN has a mental health lead who is responsible for overseeing mental health programs across that VISN.

The VA health care system, which is managed by the VHA, includes more than 150 VA medical centers (VAMCs), 780 community-based outpatient centers (CBOCs), and 130 nursing homes (Watkins et al., 2011). A VAMC is defined as a VA-owned point of service that offers two or more of the following types of care: inpatient, outpatient, residential, and institutional extended care (VA, 2013). VAMCs are the largest medical facilities with the highest capacity and widest range of medical services in the VA system. A CBOC is a VA-owned, VA-leased, mobile, contract, or shared clinic that provides a range of outpatient services and is located separate from a VAMC (VA, 2013). VAMCs and very large CBOCs (serving more than 10,000 unique veterans per year) must have integrated mental health systems that

² Personal communication, Stacy Gavin, Department of Veterans Affairs, May 25, 2017.

³ Public Law 114-2.

⁴ Personal communication, Stacy Gavin, Department of Veterans Affairs, October 3, 2017.

are capable of providing a range of mental health services within the primary care setting (VA, 2008). Large CBOCs (serving 5,000–10,000 unique veterans per year) must have on-site integrated care clinics and mid-sized CBOCs (serving 1,500–5,000 unique veterans per year) are required to have an on-site presence of mental health service available in the primary care setting (VA, 2008). Additional information on VHA's mental health services can be found in Chapter 3.

Vet Centers, established by Congress in 1979, offer readjustment counseling to veterans who served in theater during any conflict, including OEF/OIF/OND. Their services are available to former active duty, National Guard, and Reserve service members. The Vet Center Program offers services that specifically address the psychological and social consequences of combat-related problems (VA, 2010b). There are about 300 Vet Centers in the United States and its territories and about 70 mobile Vet Centers which are used for outreach and to reach veterans who live in rural areas (VA, 2016). In fiscal year (FY) 2015, almost 220,000 veterans and their families received services at a Vet Center for a total of 1,663,011 visits (VA, 2016) and in FY 2013, the Vet Center Combat Call Center received almost 44,000 calls (Fisher, 2014).

MENTAL HEALTH SERVICES IN THE BROADER U.S. HEALTH CARE SECTOR COMPARED TO THE VETERANS HEALTH ADMINISTRATION

The VA administers the largest integrated health care system in the country, with a FY 2017 operating budget of more than \$65 billion for medical care (VA, 2017a). More than 9 million veterans are enrolled in the VA health care system (VA, 2017a). In general, the VHA health care system serves as a safety net, providing care to veterans who are older, economically disadvantaged, and burdened by disease (Phillips et al., 2015). Not all veterans, however, are eligible to use VHA health care or want to use it. Many veterans have private health insurance or qualify for Medicare or Medicaid, and they obtain their health care, including mental health care, from private providers. The focus of this report is access to and the quality of mental health services for veterans through the VHA. For the purpose of general context, information on the non-VA health care sector and on mental illness in the general population is discussed below. The committee, however, did not conduct a comprehensive comparative study of VA versus non-VA mental health services or of mental illness in the veteran population versus the general population.

As detailed in other chapters of this report, problems have been identified in the provision of mental health care that is accessible and of high quality to veterans at VHA facilities. Problems regarding access to and the quality of mental health care are not unique to VHA, however; they have been documented in the private health care sector as well (AHA, 2016; The Commonwealth Fund, 2013; Merritt Hawkins, 2014; Sundararaman, 2009). In fact, for some measures—including measures related to the overall quality of care, mental health care, chronic disease management, preventive care, and mortality—research has found that VHA health care performs as well as or better than private health care (Asch et al., 2004; Jha et al., 2003; Kerr et al., 2004; Nuti et al., 2016; O'Hanlon et al., 2017; Trivedi et al., 2011; Watkins and Pincus, 2011; Watkins et al., 2016). An example specifically related to mental health care is the finding that VHA performance on medication management for mental disorders (antipsychotics, mood stabilizers, and antidepressants) is superior to the private sector's performance (Watkins and Pincus, 2011; Watkins et al., 2016). In 2017, in an effort to increase transparency about access to and the quality of VHA health care, the VA created a website, www.accesstocare.va.gov, containing information on measures such as wait times and patient satisfaction. This website also uses Hospital Compare data from the Centers for Medicare & Medicaid Services to show how VHA facilities compare with private-sector hospitals within geographic regions, although the measures are not specific to mental health care.

In 2016, about 45 million people in the United States aged 18 or older had a mental illness (excluding substance use disorders) and about 20 million people in the United States aged 12 or older had a substance use disorder. Among those with mental illness (excluding substance use disorders) about 1 in 4 (23 percent) had a serious mental illness that interfered with major life activities. Just over 8 million adults aged 18 or older had both a mental illness and substance use disorder (SAMHSA, 2017). Many people with mental health problems do not get the services they need. In 2016, 43.1 percent of adults with mental illness (excluding substance use disorders) had received mental health services in the past year (19.2 million). Among adults aged 18 or older needing substance use treatment, 10.8 percent received specialty treatment (2.1 million), while an estimated 17.7 million adults needed substance use treatment but did not receive specialty treatment (SAMHSA, 2017). Legislative initiatives that expand access to mental health care include the 2008 Mental Health Parity and Addiction Equity Act and the 2010 Patient Protection and Affordable Care Act (Mental Health and Substance Use Disorder Parity Task Force, 2016).⁵ Lack of appropriate treatment for those with mental illness can have serious consequences. For example, adults with serious psychological distress sometimes do not get needed health care, or there is a delay in obtaining health care services (Weissman et al., 2017). Also, Department of Justice surveys conducted in 2002 and 2004 found that 64.2 percent of inmates in local jails, 56.2 percent of inmates in state prisons, and 44.8 percent of inmates in federal prisons had a mental illness but that fewer than half had ever received mental health care services (NIMH, 2004). A substantial portion of inmates have substance use disorder. For example, an estimated 20 percent of inmates have a history of injection drug use (Rich et al., 2005). Furthermore, a third or fewer of inmates who have mental illness received mental health care services after incarceration. Another example relates to the U.S. homeless population. In January 2014 about 20 percent of homeless persons were identified as having a severe mental illness, and a similar percentage had a chronic substance use disorder (SAMHSA, 2016). Although the number of veterans experiencing homelessness has been decreasing in recent years, at least half of homeless veterans have a severe mental illness or chronic substance use disorder (SAMHSA, 2016).

People do not seek mental health care for a variety of reasons, including the lack of accessibility (for example, a scarcity of providers near home, a lack of available appointments due to high demand for mental health services, a lack of health insurance, a lack of mental health providers who accept health insurance, and the choice to avoid treatment because of concerns about stigma); the lack of coordination of care among primary care providers, mental health providers, and others, such as social service providers; and the lack of availability of high-quality care (for example, inadequate availability of evidence-based practices, a lack of training among primary care providers in mental health, and an inability to deliver treatments in a culturally appropriate way). Later chapters of the report explore further why people sometimes do not obtain needed mental health care services.

During the past 20 years, public and private health sectors have been undergoing a transformation toward providing care that is more patient centered, of higher quality, better integrated, and more efficiently delivered (ECRI Institute, 2013; Greenfield and Kaplan, 2004; Gresen, 2012; Hartmann et al., 2009; Hogan, 2003; IOM, 2001; Unutzer et al., 2006; Weeks and Bagian, 2000; Young, 2000). In the VA, for example, MyVA is a recent initiative for service excellence and organizational performance (see Chapter 7 for details). Health services transformation in both the public and private health care sectors is making improvements in care, but many challenges remain. For example, access to and the quality of mental health care services in both sectors is adversely affected by a shortage of mental health providers, especially in rural areas (AHA, 2016; Burnam et al., 2009; Merritt Hawkins, 2015). In later chapters of this report the committee explores many of the challenges facing the evolving VHA health

⁵Public Law 110-343, Public Law 111-148.

care system (for example, the shortage of mental health providers in the VHA health care system, the VA's hiring process for providers, the training of providers in the use of evidence-based therapies, and reducing barriers to mental health care encountered by some veterans) and makes recommendations for addressing these challenges.

REFERENCES

- AHA (American Hospital Association). 2016. *The state of the behavioral health workforce: A literature review*. Washington, DC: American Hospital Association.
- Asch, S. M., E. A. McGlynn, M. M. Hogan, R. A. Hayward, P. Shekelle, L. Rubenstein, J. Keesey, J. Adams, and E. A. Kerr. 2004. Comparison of quality of care for patients in the Veterans Health Administration and patients in a national sample. [summary for patients in *Annals of Internal Medicine* 141(12):142; pmid: 15611486]. *Annals of Internal Medicine* 141(12):938–945.
- Burnam, M. A., L. S. Meredith, T. Tanielian, and L. H. Jaycox. 2009. Mental health care for Iraq and Afghanistan war veterans. *Health Affairs (Millwood)* 28(3):771–782.
- CBO (Congressional Budget Office). 2011. CBO testimony: Statement of Randall B. Williamson, director, health care federal recovery coordination program: Enrollment, staffing, and care coordination pose significant challenges. Delivered before Subcommittee on Health, Committee on Veterans' Affairs, House of Representatives, May 13, 2011.
- The Commonwealth Fund. 2013. *International profiles of health care systems, 2013*. New York: The Commonwealth Fund.
- ECRI Institute. 2013. Systemness in healthcare: More than the sum of its parts. In *Health Technology Trends*. Plymouth Meeting, PA: ECRI Institute.
- Fisher, M. 2014. Readjustment counseling services response to data request (Vet Center update) from the Committee on the Assessment of Ongoing Efforts in the Treatment of PTSD. VA. Washington, DC. January 9, 2014.
- GAO (Government Accountability Office). 2011. *DoD and VA health care: Federal Recovery Coordination Program continues to expand but faces significant challenges*. Washington, DC: Government Accountability Office.
- Greenfield, S., and S. H. Kaplan. 2004. Creating a culture of quality: The remarkable transformation of the Department of Veterans Affairs health care system. *Annals of Internal Medicine* 141(4):316–318.
- Gresen, R. C. 2012. Mental healthcare in the Veterans Health Administration. In *The Praeger handbook of veteran's health, vol. II*, edited by T. Miller. Santa Barbara, CA: ABC-CLIO. Pp. 93–133.
- Hartmann, C. W., M. Meterko, A. K. Rosen, Z. Shibe, P. Shokeen, S. Singer, and D. M. Gaba. 2009. Relationship of hospital organizational culture to patient safety climate in the Veterans Health Administration. *Medical Care Research and Review* 66(3):320–338.
- Hogan, M. F. 2003. The President's New Freedom Commission: Recommendations to transform mental health care in America. *Psychiatric Services* 54(11):1467–1474.
- IOM (Institute of Medicine). 2001. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- Jha, A. K., J. B. Perlin, K. W. Kizer, and R. A. Dudley. 2003. Effect of the transformation of the Veterans Affairs health care system on the quality of care. *New England Journal of Medicine* 348(22):2218–2227.
- Kerr, E. A., R. B. Gerzoff, S. L. Krein, J. V. Selby, J. D. Piette, J. D. Curb, W. H. Herman, D. G. Marrero, K. M. Narayan, M. M. Safford, T. Thompson, and C. M. Mangione. 2004. Diabetes care quality in the Veterans Affairs health care system and commercial managed care: The Triad Study. *Annals of Internal Medicine* 141(4):272–281.
- Mental Health and Substance Use Disorder Parity Task Force. 2016. *Final report*. Washington, DC: Executive Office of the President of the United States.
- Merritt Hawkins. 2014. *Physician appointment wait times and Medicaid and Medicare acceptance rates*. Irving, TX: Merritt Hawkins.
- Merritt Hawkins. 2015. *2015 review of physician and advanced practitioner recruiting incentives*. Irving, TX: Merritt Hawkins.
- NIMH (National Institute of Mental Health). 2004. *Inmate mental health*. www.nimh.nih.gov/health/statistics/prevalence/inmate-mental-health.shtml (accessed January 3, 2017).

- Nuti, S. V., L. Qin, J. S. Rumsfeld, J. S. Ross, F. A. Masoudi, S. L. Normand, K. Murugiah, S. M. Bernheim, L. G. Suter, and H. M. Krumholz. 2016. Association of admission to Veterans Affairs hospitals vs. non-Veterans Affairs hospitals with mortality and readmission rates among older men hospitalized with acute myocardial infarction, heart failure, or pneumonia. *JAMA* 315(6):582–592.
- O’Hanlon, C., C. Huang, E. Sloss, R. Anhang Price, P. Hussey, C. Farmer, and C. Gidengil. 2017. Comparing VA and non-VA quality of care: A systematic review. *Journal of General and Internal Medicine* 32(1):105–121.
- Phillips, B. R., T. A. Shahoumian, and L. I. Backus. 2015. Surveyed enrollees in Veterans Affairs health care: How they differ from eligible veterans surveyed by BRFSS. *Military Medicine* 180(11):1161–1169.
- Rich, J. D., A. E. Boutwell, D. C. Shield, R. G. Key, M. McKenzie, J. G. Clarke, and P. D. Friedmann. 2005. Attitudes and practices regarding the use of methadone in US state and federal prisons. *Journal of Urban Health* 82:411–419.
- SAMHSA (Substance Abuse and Mental Health Services Administration). 2016. *Homelessness and housing*. <https://www.samhsa.gov/homelessness-housing> (accessed January 11, 2017).
- SAMHSA. 2017. *Receipt of services for substance use and mental health issues among adults: Results from the 2016 National Survey on Drug Use and Health*. Rockville, MD: U.S. Department of Health and Human Services.
- Sundararaman, R. 2009. *The U.S. mental health delivery system infrastructure: A primer*. Washington, DC: Congressional Research Service.
- Trivedi, A. N., S. Matula, I. Miake-Lye, P. A. Glassman, P. Shekelle, and S. Asch. 2011. Systematic review: Comparison of the quality of medical care in Veterans Affairs and non-Veterans Affairs settings. *Medical Care* 49(1):76–88.
- Unutzer, J., M. Schoenbaum, B. G. Druss, and W. J. Katon. 2006. Transforming mental health care at the interface with general medicine: Report for the President’s Commission. *Psychiatric Services* 57(1):37–47.
- VA (Department of Veterans Affairs). 2008. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2010a. *2010 organizational briefing book*. Washington, DC: Department of Veterans Affairs.
- VA. 2010b. *VHA directive 1500: Readjustment Counseling Service (RCS) Vet Center Program*. Washington, DC: Department of Veterans Affairs.
- VA. 2013. *VHA site classifications and definitions*. Washington, DC: Department of Veterans Affairs.
- VA. 2015. *Health benefits*. <http://www.va.gov/HEALTHBENEFITS/apply/veterans.asp> (accessed October 23, 2015).
- VA. 2016. *Vet Center Program*. <http://www.vetcenter.va.gov/> (accessed March 24, 2017).
- VA. 2017. *Department of Veterans Affairs FY 2017 budget request fact sheet*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2012. *Audit of management control structures for veteran integrated service network offices*.
- Watkins, K., and H. Pincus. 2011. *Veterans Health Administration mental health program evaluation: Capstone report*. Arlington, VA: RAND Corporation.
- Watkins, K. E., H. A. Pincus, B. Smith, S. M. Paddock, J. Thomas, E. Mannle, A. Woodroffe, J. Solomon, M. E. Sorbero, C. M. Farmer, K. A. Hepner, D. M. Adamson, L. Forrest, and C. Call. 2011. *Veterans Health Administration mental health program evaluation: Capstone report*. Santa Monica, CA: RAND Corporation.
- Watkins, K. E., B. Smith, A. Akincigil, M. E. Sorbero, S. Paddock, A. Woodroffe, C. Huang, S. Crystal, and H. A. Pincus. 2016. The quality of medication treatment for mental disorders in the Department of Veterans Affairs and in private-sector plans. *Psychiatric Services* 67(4):391–396.
- Weeks, W. B., and J. P. Bagian. 2000. Developing a culture of safety in the Veterans Health Administration. *Effective Clinical Practice* 3(6):270–276.
- Weissman, J., D. Russell, M. Jay, J. M. Beasley, D. Malaspina, and C. Pegus. 2017. Disparities in health care utilization and functional limitations among adults with serious psychological distress, 2006–2014. *Psychiatric Services* 68(7):653–659.
- Yano, E. M., D. L. Washington, C. Goldzweig, C. Caffrey, and C. Turner. 2003. The organization and delivery of women’s health care in Department of Veterans Affairs medical center. *Womens Health Issues* 13(2):55–61.
- Young, G. J. 2000. Managing organizational transformations: Lessons from the Veterans Health Administration. *California Management Review* 43(1):66–82.

3

The Veterans Health Administration's Mental Health Services

The Veterans Health Administration (VHA), which manages the integrated health care system of the Department of Veterans Affairs (VA), provides eligible veterans, including U.S. veterans of the Iraq and Afghanistan wars, with a comprehensive array of mental health care services in outpatient, inpatient, and residential settings. After enrolling to receive VHA health care, eligible veterans can access these services in several ways. They may walk into a VHA facility and request mental health services. If they are already being seen in primary care, they may receive their mental health services within the primary care setting, if needed, or be referred to specialty care. Vet Centers provide a third pathway into mental health care. Veterans can walk into a Vet Center on their own with or without a referral. Again, should more specialized or acute services be required, Vet Centers can make the appropriate referral to mental health specialty care or primary care. Finally, veterans may enter the VHA health care system via emergency service departments, either at VHA facilities or at civilian hospitals; those seen in civilian emergency service departments may be later referred to VHA health care.

Figure 3-1 depicts an algorithm by which veterans are triaged within the mental health system. For illustrative purposes, the figure reflects a one-way process for the initial placement of a veteran. However, once veterans are receiving mental health care, they move within and between service levels in any direction as need dictates.

Although Figure 3-1 illustrates how veterans are moved through VHA mental health care, it does not reflect the way mental health care services are integrated with the rest of the VHA health care system. Veterans have complete access to medical specialty services as needed. Similarly, veterans receiving medical care can be referred at any time to mental health care if the need arises. To support this fully integrated system of care, VHA has an integrated electronic medical record documenting all care that is provided, with all providers within the system given complete access to all records, including mental health care records. Given that a large percentage of veterans treated by VHA have comorbid medical and mental health diagnoses, it would appear to make good sense to provide veterans with a fully integrated medical and mental health system of care.

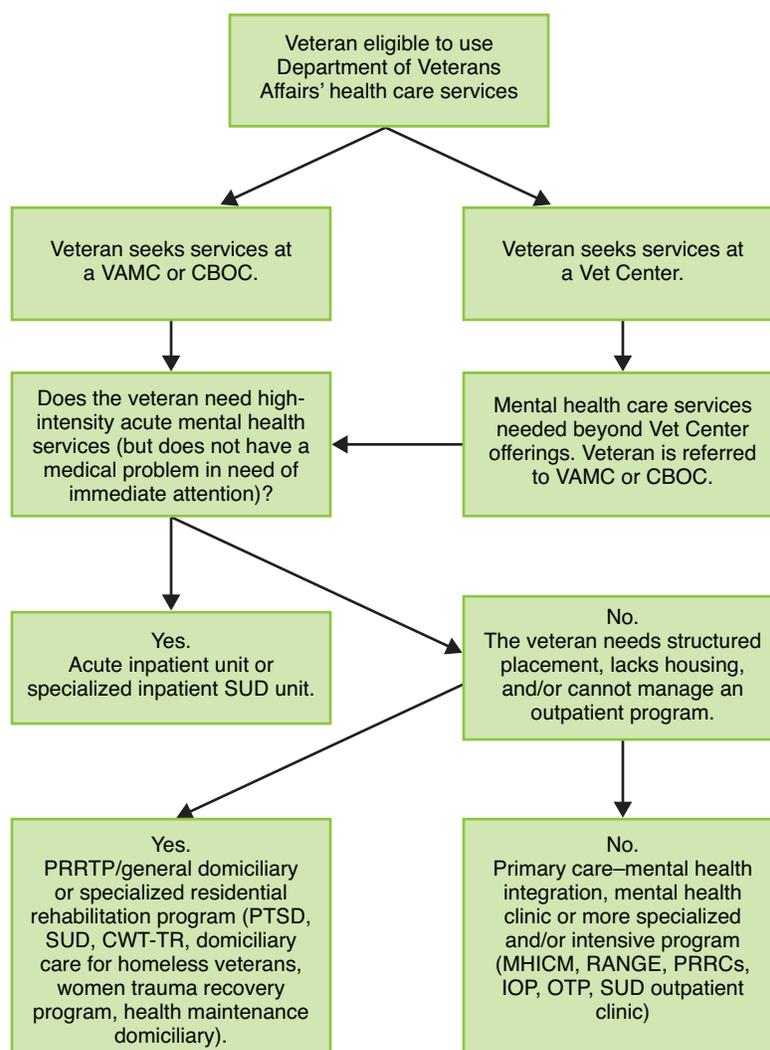


FIGURE 3-1 Algorithm to determine appropriate placement of veterans within the system of mental health care at the Department of Veterans Affairs. See the next section of this chapter for a description of the programs and services depicted in this figure.

NOTE: CBOC = community-based outpatient clinic; CWT-TR = compensated work therapy-transitional residence; IOP = intensive outpatient program; MHICM = mental health intensive case management; OTP = opioid treatment program; PRRC = Psychosocial Rehabilitation and Recovery Center; PRRTP = Psychosocial Residential Rehabilitative Treatment Program; PTSD = posttraumatic stress disorder; RANGE = Rural Access Network for Growth and Enhancement; SUD = substance use disorder; VAMC = Veterans Affairs medical center.

In addition to the mental health care services depicted in Figure 3-1, the following teams, specialists, and programs are available to support all inpatient, outpatient, and residential programs:

- Posttraumatic stress disorder (PTSD) clinical teams and PTSD specialists,
- Substance use and PTSD dual diagnosis teams,
- Women's stress disorder treatment teams,

- Services for returning veterans—mental health teams,
- Health Care for Re-Entry Veterans, and
- Vocational rehabilitation programs.

Also, several programs have been created that specifically target the homeless veteran population: Department of Housing and Urban Development—VA Supportive Housing (HUD-VASH), Health Care for Homeless Veterans, Grant and Per Diem program, and Homeless Veterans Supported Employment Program.

This chapter is intended to be solely descriptive and to illustrate the breadth of programs and services offered by the VA. Evaluating all of the individual programs and services described below is beyond the scope of work. The next section of this chapter defines VHA mental health programs and services without making any statements regarding quality and service gaps; those topics will be addressed in later chapters. That section is followed by another section covering major VA mental health evaluation, research, and support centers that serve to monitor as well as inform clinical practice.

MENTAL HEALTH–RELATED PROGRAMS AND SERVICES

The VHA offers an array of recovery-oriented mental health programs and services for eligible veterans across the country, including programs for substance use disorders (SUDs). VHA mental health programs and services have been developed to create a comprehensive array of care from acute, intensive inpatient care to residential rehabilitation and a variety of outpatient services. Because a substantial percentage of veterans treated in any given program have comorbid mental health conditions, virtually all programs have either in-house services or services available by referral to address the complex combinations of issues presented by the veteran population. This section summarizes the key mental health programs and clinical services offered at VHA health care facilities.

Primary Care–Mental Health Integration

Primary care–mental health integration (PC-MHI) is based on the Institute of Medicine's definition of primary care: Primary care is the provision of continuous, comprehensive, and coordinated care to populations undifferentiated by gender, disease, or organ system. It provides accessible, integrated, biopsychosocial health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community (IOM, 1996).

PC-MHI was widely implemented throughout the VHA health care system beginning in 2007 (Johnson-Lawrence et al., 2012) and must be available at all VA medical centers (VAMCs) and at all large and very large community-based outpatient clinics (VA, 2015c). Primary care providers identify and address mental health conditions at the “sub-clinical, minor, or moderate levels before they escalate to full diagnostic-level problems” (Dundon et al., 2011, p. 10). PC-MHI providers are members of patient-aligned care teams (PACTs); collaborate with other team members to assess, support, or provide treatment; and conduct follow-up care (VA, 2012a). The VHA began implementing PACTs in its primary care clinics in 2010 (Rosland et al., 2013). PACTs are based on the patient-centered medical home model of health care. Each team consists of a primary care provider, a registered nurse care manager, a clinical associate (a licensed practical nurse or medical assistant), an administrative clerk, the veteran, and the veteran's family and caregivers (VA, 2016k). Other personnel, such as social workers, dietitians, pharmacists, mental health practitioners, physical therapists, and specialists, can be added to

the team as needed. Each team provides care for about 1,200 patients (Rosland et al., 2013). Mild to moderate mental health conditions are managed within the PACTs (Kearney et al., 2014). In general, only patients who have severe mental health conditions are referred to specialty mental health services. The goals of the PACTs are to improve patient access to care through more efficient scheduling of appointments (including same-day appointments), to conduct more appointments by phone and by shared medical appointments, to increase patient access to personal health data and providers via the Internet, to improve coordination of care through the use of case managers and regular team “huddles,” and to improve communication between the care teams and their patients by training staff in patient-centered communication (Rosland et al., 2013). Chapter 12 presents more information about PACTs and other evidence-based care delivery approaches that systematically coordinate care given by VHA primary care, mental health, and substance-use treatment providers to effectively treat patients with mental health conditions.

General Outpatient Mental Health Services

General mental health clinics at VAMCs provide outpatient mental health services to veterans who do not require more specialized programs. Veterans should receive an appointment within 30 days. They will be seen by psychiatrists, psychologists, or other behavioral health providers who conduct a comprehensive evaluation and provide treatment (for example, psychotherapy, medications, and social support services) (VA, 2014e).

VHA has recently introduced the Behavioral Health Interdisciplinary Program (BHIP) within its general mental health clinics (VA, 2014e). This model of care assigns patients to interdisciplinary teams of providers and clerical staff who coordinate and deliver the patients’ general mental health care. The goals of using the BHIP teams include better integration of outpatient mental health care, improved access for patients, and improved coordination and continuity of care. Chapter 12 presents more information about BHIP and other evidence-based care delivery approaches that systematically coordinate care given by VHA primary care, mental health, and substance-use treatment providers to effectively treat patients with mental health conditions.

Mental Health and Domiciliary Residential Rehabilitation and Treatment Programs

Mental Health Residential Rehabilitation and Treatment Programs (MH RRTPs) and Domiciliary Residential Rehabilitation and Treatment Programs (DRRTPs) provide services for a variety of illnesses, problems, and needs relating to the mental health of veterans in a residential setting. Care can be provided in general programs or, when appropriate and available, specialized programs as described below. MH RRTPs/DRRTPs provide a level of bed care that is distinct from high-intensity inpatient psychiatric care in that the patients do not require bedside nursing care and are generally capable of self-care (VA, 2010a). Candidates for admission have severe and often multiple conditions but do not need acute inpatient psychiatric or medical care and are not at significant risk to themselves or to others (VA, 2010a). To be eligible, veterans must lack stable living arrangements which are necessary for their recovery. Brief overviews of the different programs are detailed below, but the clinical policies and practices are identical for all programs, as determined by the Department of Veterans Affairs Central Office (VACO) (VA, 2013).

Some programs may provide the care within the departments themselves (referred to as the *all-inclusive residential model*), or they may have veterans receive services through outpatient programs such as psychosocial rehabilitation and recovery center while keeping residence in the MH RRTPs/

DRRTPs (the *supportive residential model*) (VA, 2010a). In either case, the purpose of the residential component is to provide a structured environment to integrate rehabilitative gains from treatment into a lifestyle of self-care and personal accountability.

The VHA acknowledges that access to these programs can be difficult for the veterans who need them. The handbook outlining the MH RRTPs/DRRTPs policies cites veteran poverty, homelessness, disabilities, and psychological conditions as barriers to admission to MH RRTPs/DRRTPs. The handbook also cites transportation to screening appointments as another barrier to the programs. In response to these barriers, the VA requires that screening for admission occur during one single contact (VA, 2010a). Also, the MH RRTP/DRRTP program manager or the domiciliary chief is responsible for facilitating improved access to screening appointments by providing transportation assistance to veterans who may have difficulty getting to appointments.

Psychosocial Residential Rehabilitative Treatment Program and General Domiciliary

A Psychosocial Residential Rehabilitative Treatment Program (PRRTP) and a General Domiciliary (Gen Dom) provides a residential level of care to veterans who do not require a more specialized program. PRRTPs are typically more structured, “all inclusive” units serving veterans with serious mental illnesses, while Gen Dom beds within MH RRTPs/DRRTPs are generally less structured and serve veterans with less severe conditions (VA, 2010a). Veterans who need specialty care for a specific condition should not be admitted to the PRRTP or Gen Dom, but rather to a program that addresses the needed specialty care (VA, 2010a).

Health Maintenance Domiciliary

Health maintenance domiciliaries are MH RRTPs/DRRTPs that focus on symptom reduction and stabilization as part of the treatment approach to recovery and community reintegration (VA, 2010a). These programs target veterans with more complex medical problems comorbid with their psychiatric conditions than are typically found in other residential programs.

Posttraumatic Stress Disorder–Residential Rehabilitative Treatment Programs or Domiciliary Posttraumatic Stress Disorder

Posttraumatic stress disorder–residential rehabilitative treatment programs (PTSD-RRTPs) and domiciliary posttraumatic stress disorder programs (Dom-PTSDs) provide care to veterans who have PTSD, including those who have suffered military sexual trauma (MST). PTSD-RRTPs and Dom-PTSDs provide PTSD treatment, SUD treatment, and psychosocial rehabilitation (employment, community supports, and housing) (VA, 2010a).

Substance Abuse Residential Rehabilitative Treatment Program and Domiciliary Substance Abuse

Substance abuse residential rehabilitative treatment programs (SARRTPs) and domiciliary substance abuse (Dom SA) programs provide a residential level of care to a veteran population with diagnosed SUD. The programs provide a stable substance-free supervised recovery environment for veterans with SUDs who require a structured setting while they are treated and working toward recovery. Addiction severity, comorbidities, and a higher risk of relapse in a less structured environment are all reasons

why a SARRTP may be more appropriate than treatment in an ambulatory setting (VA, 2010a). To be admitted to a SARRTP, veterans must either require no monitoring or be at risk for no more than mild withdrawal according to a standardized clinician-administered assessment (Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised) (VA, 2010a).

Women Trauma Recovery Program

The Women Trauma Recovery Program offers continuing PTSD treatment, sobriety maintenance, and employment and housing support (VA, 2010c). Each Veterans Integrated Service Network (VISN) must have a residential program that meets the needs of the women veterans it serves. If the number of women veterans within the VISN does not meet the threshold for that VISN to provide a specific program, the VISN is required to use national or regional resources to meet the clinical needs of women veterans who seek services.

Compensated Work Therapy–Transitional Residence Program

The goal of compensated work therapy–transitional residences (CWT-TRs) is to effectively reintegrate veterans into their home communities by fostering greater independence, improving social status, reducing hospitalization, and enabling community work based on the veterans' capabilities and desires (VA Office of Inspector General, 2011). CWT-TRs target a wide variety of veterans, including veterans with severe SUDs who frequently rely on institutional care, homeless veterans with mental disorders who under-use VA services, veterans with PTSD, and veterans with serious psychiatric disorders and concomitant vocational deficits (VA, 2010a).

Domiciliary Care for Homeless Veterans

Domiciliary care for homeless veterans (DCHV) provides time-limited residential treatment to homeless veterans with significant health and social–vocational deficits. The program provides access to medical, psychiatric, and SUD treatment as well as access to social and vocational programs (VA, 2010a). The goals of the program are to address conditions and barriers that contribute to homelessness, health status, and employment performance. DCHV also aims to reduce the overall reliance of homeless veterans on VHA inpatient services and to prepare veterans for and place them in a safe community environment. The program admits veterans who are homeless or at risk of becoming homeless and gives priority to veterans who have recently been discharged from the military (VA, 2010a).

Acute Inpatient Mental Health Services

Veterans in need of intensive crisis-oriented assessment and intervention for their mental illness or SUDs are admitted to inpatient mental health programs. The inpatient program may be located within a VAMC, which is most common, or a non-VHA community facility that has an agreement with the VHA (VA, 2015c). Veterans who have urgent and severe mental health conditions must be admitted to an inpatient unit without delay. Inpatient SUD-specific units are far less numerous than in years past as these services are now generally provided by SUD-experienced staff in inpatient general psychiatry, medical, and surgical units (VA, 2012b). Inpatient stays are typically short term, with veterans moving to other levels of care when clinically appropriate and safe to do so. All VHA emergency departments are required to have mental health providers on site or on call (VA, 2015c). VAMCs with emergency

departments have to be equipped to provide observations or evaluations for up to 23 hours when necessary, either in the emergency department or on inpatient units.

Select Population Programs

Housing and Urban Development—Veterans Affairs Supportive Housing

The HUD–VASH program was established to provide housing and clinical assistance to the neediest veterans and their immediate families. In partnership with the Department of Housing and Urban Development (HUD), the VA provides case management and clinical services, while HUD provides permanent housing subsidies through its Housing Choice program. Working with an assigned case manager, veterans in the HUD-VASH program develop a house stabilization plan that includes both housing and treatment needs and recovery goals. To be eligible for the program, veterans must be eligible for VHA health care services and either lack a regular nighttime residence or have a primary residence that is a shelter, temporary housing facility, or a place not normally used as a regular sleeping accommodation (National Center on Homelessness Among Veterans, 2012). In addition to housing, the veteran will be offered needed primary care, mental health, and SUD services as well as employment and financial management assistance and training. Case management services continue as long as the veteran needs them; however, the subsidized housing can extend indefinitely after case management support has ended (National Center on Homelessness Among Veterans, 2012).

Health Care for Homeless Veterans

The Health Care for Homeless Veterans (HCHV) program serves as a gateway to VA services for eligible veterans who are homeless and in need of care. Services and functions of the HCHV include outreach to veterans, treatment, rehabilitative services, case management, and transitional housing assistance. Through the use of contracted residential services in different communities, the program engages otherwise hard-to-reach homeless veterans and connects them with needed mental health, primary care, and SUD services (VA, 2014f).

Grant Programs

The Grant and Per Diem (GPD) program is designed to fund new projects in the public or non-profit sector that will provide services for homeless veterans. Competitively awarded grants may be used to fund up to 65 percent of the acquisition, renovation, or construction costs for a building that will be used to supply supportive housing or support services for homeless veterans. Grant awardees may also request per diem funding to help offset the operational costs of the associated projects (VA, 2014a). All VAMCs with at least 100 homeless veterans in their primary service area must have a GPD or alternative residential care setting (VA, 2015c).

The Supportive Services for Veterans Families program gives grants to private non-profit organizations and community cooperatives to provide a variety of supportive services (for example, case management; assistance in obtaining VA and other public benefits; and providing temporary financial assistance for rent, utilities, and other expenses) for low-income veteran families (VA, 2017a). The goal of this program is to promote housing stability to homeless and at-risk veterans and their families.

Healthcare for Re-Entry Veterans

The Healthcare for Re-Entry Veterans (HCRV) program is intended to connect veterans recently released from federal or state prison to needed primary care, mental health, or SUD services. The program also provides outreach through a police training coordinator and justice outreach coordinator to local police enforcement and criminal justice systems to educate and advocate for mental health treatment as an alternative to incarceration when veterans with mental illness commit non-violent offenses (VA, 2015c). Each VISN must appoint a full-time HCRV specialist to lead the effort (VA, 2015c). VACO policy encourages the assignment of one specialist per state (VA, 2015c).

Services for Returning Veterans–Mental Health

Services for Returning Veterans–Mental Health (SeRV-MH) teams were first used in 2005 to identify and reach out to veterans returning from deployment in Iraq and Afghanistan, to provide them with information about stress-related disorders and coping mechanisms, and to assess their mental health needs. The goal of the program is to engage veterans for early detection and correction of problems relating to mental health (VA, 2010c). Most SeRV-MHs are associated with facility PTSD programs. There are no requirements for facilities to implement SeRV-MH; the only requirement is that they are able to assess and treat the mental health needs specific to OEF and OIF veterans (VA, 2010c).

Occupational Programs

Compensated work therapy (CWT) programs provide vocational training and employment opportunities to veterans with the ultimate goal of successfully reintegrating the veteran into their home communities. CWTs are required in every VAMC and must be made available to any veterans who have trouble obtaining or maintaining employment because of occupational challenges relating to their mental illness or physical illness co-occurring with their mental illness (VA, 2015c). A variety of specialized programs operate under the CWT umbrella. These include the Incentive Therapy program, the Sheltered Workshop program, the Transitional Work program, the Supported Employment program, and the Transitional Residence program (described in the Mental Health Residential Treatment Program section above).

Vet Centers

The Vet Center program offers services that specifically address the psychological and social sequelae of combat-related problems in former active-duty, National Guard, and Reserve service members (VA, 2010b). In addition to providing readjustment counseling, Vet Centers offer community education, outreach to special populations, brokering of services with community agencies, and the referral of veterans to other VA services (VA, 2010b).

Every Vet Center has a multidisciplinary staff with at least one licensed mental health professional. The program is designed to provide easy access to services, separate from the bureaucratic obstacles veterans often face navigating the VA system (VA, 2010d). Services are provided confidentially and do not appear on the veterans' VHA health record (although Vet Centers do maintain their own patient-record system). There are about 300 Vet Centers in the United States and its territories and about 70 mobile Vet Centers which are used for outreach and to reach veterans who live in rural areas (VA, 2016l).

Services offered by Vet Centers include individual and group counseling for veterans and their families; family counseling for military-related issues; bereavement counseling for families who experience an active-duty death; counseling and referral for MST-related conditions; SUD assessment and referral; employment assessment and referral; Veterans Benefit Administration referral for benefit assistance; and medical and mental health screening and referral (VA, 2010d).

Chaplaincy

The VHA employs hospital chaplains and considers them to be a part of patient care teams (VA, 2015b). The chaplains' role is to provide spiritual and pastoral care to veterans receiving treatment in all settings and levels of care, if desired by the veteran. Chaplain-provided care for veterans and service members who have mental health needs is a component of the VA/Department of Defense's (DoD's) Integrated Mental Health Strategy (DoD and VA, 2011). The VHA has a national Mental Health and Chaplaincy initiative that fosters the development of a more integrated system of health care (VA, 2016h). The reasons that veterans may seek mental health care from chaplains rather than mental health professionals include "reduced stigma, greater confidentiality, more flexible availability, and comfort with clergy as natural supports within a community" (Nieuwsma et al., 2013, p. 11).

Department of Veterans Affairs Crisis Line

The Veterans Crisis Line, which the VA administers jointly with the Department of Defense, was established in 2007 (originally called the National Veterans Suicide Prevention Hotline). The service, which can be accessed via a toll-free hotline, online chat (added in 2009), and text messaging (added in 2011), provides veterans and service members in crisis and their families and friends with immediate support and connects them with VHA mental health services. The responders are trained to address the mental health concerns of service members and veterans, and some responders are veterans themselves. Since 2007 about 2.9 million calls, 350,000 chats, and 73,000 texts have been received by the Crisis Line.¹ Additional information on the Veterans Crisis Line can be found in Chapters 4 and 9.

PROGRAMS AND CENTERS SUPPORTING QUALITY OF MENTAL HEALTH SERVICES

This section summarizes the key VA centers and initiatives that support the VHA's mental health clinical services. It does not describe the interaction of these entities with each other and with the clinical care systems, however, as that goes well beyond the scope of the present study. Nor does this section provide an exhaustive list of support centers; there are additional VA centers that include mental health as part of their portfolios.

Northeast Program Evaluation Center

The Northeast Program Evaluation Center, located in West Haven, Connecticut, is responsible for overseeing and evaluating the VHA's mental health services' programs, and it produces several products. It periodically releases "report cards" on the National Mental Health Program Performance Monitoring System, which are evaluation reports of the VHA's mental health programs. Similarly,

¹Personal communication, VA, June 16, 2017.

it produces the Long Journey Home reports, which report on the status of the VHA's specialized treatment programs for PTSD, the VHA's PTSD specialists, and the SeRV-MH program (VA, 2010c, 2014b). The center produces toolkits for sites to use in creating reports for accreditation purposes and also produces PTSD fact sheets. It supports ad hoc data requests from the Office of Mental Health and Suicide Prevention and provides support to the PTSD Mentoring Program and other National Center for PTSD initiatives (Hoff, 2014).

Mental Illness Research, Education and Clinical Centers

Congress established the Mental Illness Research, Education and Clinical Centers (MIRECCs) program in 1996 to explore the causes of and treatments for mental health disorders. The centers are charged with disseminating new findings into clinical practice and are located in 10 VISNs (VA, 2016f). Each MIRECC has a different focus. For a complete list of MIRECCs and their focus, see Table 3-1.

In addition to conducting research on mental health conditions, the MIRECCs also work to implement the new findings in order to improve clinical practice in the VHA. For example, efforts to implement supported employment, an evidence-based treatment for schizophrenia, in four VISNs resulted in 2.3 times more veterans receiving this type of treatment (VA, 2015a). These centers also are funded to provide postdoctoral training in mental health for physicians in psychiatry, neurology, radiology, internal medicine, or other areas of medicine and for allied health professionals from clinical psychology, counseling psychology, social work, nursing, and pharmacy (VA, 2016g).

Centers of Excellence

Centers of excellence are designed to be incubators for new methods of treatment and service delivery (VA, 2011). Each center has a different focus. See Table 3-2 for a list of the centers, their locations, and their focuses.

TABLE 3-1 MIRECCs in the VHA

MIRECC	Focus
New England MIRECC	Improve services for veterans with dual diagnoses (that is, veterans with mental illness in combination with addiction problems)
VISN 2 MIRECC	Maximize recovery for veterans with SMI
VISN 4 MIRECC	Treatment and prevention of comorbid medical, mental health, and/or SUD
Capitol Health Care Network MIRECC	Improve the care of all veterans with schizophrenia and other SMI
Mid-Atlantic MIRECC	Clinical assessment and treatment of postdeployment mental illness and related problems, development of novel mental health interventions
South Central MIRECC	Improve access to evidence-based practices in rural and other underserved populations
Rocky Mountain Network MIRECC	Reduce suicide in the veteran population
Northwest MIRECC	Applies genetic, neurobiological and clinical trial methods to the discovery of effective treatments for major mental disorders
Sierra Pacific MIRECC	Improve clinical care for veterans with dementias and with PTSD
Desert Pacific MIRECC	Improve the outcome of patients with chronic psychotic mental disorders (schizophrenia, schizoaffective disorder, and psychotic mood disorders)

NOTE: MIRECC = Mental Illness Research, Education and Clinical Center; PTSD = posttraumatic stress disorder; SMI = serious mental illness; SUD = substance use disorder; VHA = Veterans Health Administration; VISN = Veterans Integrated Service Network.

SOURCE: VA, 2016a.

TABLE 3-2 VA Centers of Excellence

Center of Excellence	Location	Focus
Center for Integrated Health Care	Syracuse VA Medical Center; VA Western New York Health Care System at Buffalo	Improve the integration of mental health services into the primary care setting
Center of Excellence for Suicide Prevention	Canandaigua Medical Center, New York	Reduce the morbidity and mortality in the veteran population associated with suicide
Center of Excellence for Research on Returning War Veterans	Doris Miller VA Medical Center, Waco, Texas	Improve knowledge about mental health issues in returning war veterans, with a particular focus on OEF/OIF/OND veterans
Center of Excellence for Stress and Mental Health	VA San Diego Health Care System, California	Improve knowledge about the effects of stress and trauma-related health problems
Center of Excellence for Substance Abuse Treatment and Education	Philadelphia VA Medical Center, Pennsylvania; Puget Sound VA Health Care System, Washington	Provide advice to the VA Central Office on how to improve SUD treatment; evaluate research on SUDs and treatments

NOTE: OEF/OIF/OND = Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn; SUD = substance use disorder; VA = Department of Veterans Affairs.

SOURCE: VA, 2011.

Quality Enhancement Research Initiative and Center for Mental Health and Outcomes Research

The Quality Enhancement Research Initiative (QUERI) and the Center for Mental Health and Outcomes Research operate under the Health Services Research and Development Service within the VHA (VA, 2014c). QUERI's mission is to enhance the quality and outcomes of VHA health care by systematically implementing clinical research findings and evidence-based recommendations into routine clinical practice (VA, 2014c). QUERI evaluates quality of care across three domains—structure, process, and outcomes—and is committed to using research results to drive improved interventions within the VHA health system. The QUERI program, first established in the 1990s, has recently evolved from 10 centers, each with a focus on a specific disease or condition, such as the Substance Use Disorder QUERI and the Mental Health QUERI, to a collection of 15 interdisciplinary programs with cross-cutting partnerships aimed at achieving VHA national priority goals and specific implementation strategies. For example, in the area of mental health, the QUERI for Team-Based Behavioral Health (in Little Rock, Arkansas) focuses on how team-based behavioral health care can be improved through the use of implementation facilitation strategies, with the ultimate goal of improving veteran outcomes. The Care Coordination QUERI (in Los Angeles, California) aims to learn how to improve coordination between the veteran, his or her primary care team, and any specialty care, emergency department, hospital, and home community resources the veteran may need (VA, 2017b). And the mission of the Center for Mental Health and Outcomes Research (located in North Little Rock, Arkansas) is “to optimize outcomes for veterans by conducting innovative research to improve access to and engagement in evidence-based mental health and substance use care” (VA, 2017c). In particular, its focus is to conduct research to improve mental health care for rural veterans.

Serious Mental Illness Research and Evaluation Center

The Serious Mental Illness Research and Evaluation Center (SMITREC) is a national center for data collection and management and focuses on veterans with serious mental illness. The center runs the National Psychosis Registry and the National Registry for Depression, which collect and maintain data from all VHA patients with these diagnoses (VA, 2014d). Offices within VACO as well as at the VISN and facility level can access these data in order to evaluate clinical practices and inform policy. SMITREC is located within the Ann Arbor VA Center for Clinical Management Research.

SMITREC's mission is to conduct critical evaluation that will (1) enhance the mental and physical health care of veterans with serious mental illnesses by providing clinicians with state-of-the-art information on the effectiveness of treatment options; (2) inform the VA on issues of access to care, customer and clinician satisfaction, efficiency, and the delivery of quality health care; and (3) provide VA policy makers with relevant and timely guidance on key issues important to optimizing the system-wide delivery of health care to veterans with serious mental illness (VA, 2014d).

Program Evaluation and Resource Center

The VA's Program Evaluation and Resource Center (PERC) provides program evaluation and technical assistance for mental health quality improvement efforts across the VHA (Trafton, 2014). Specific activities conducted by PERC include monitoring the organization and delivery of mental health and substance-use treatment services in primary and specialty care programs; improving the accessibility, processes, and outcomes of interventions for patients with mental health and SUDs; providing data, analyses, and technical assistance to facilitate the implementation of policies on mental health and substance use treatment; and conducting program evaluations, as requested. An example of an ongoing evaluation conducted by PERC is its quarterly review of more than 200 quality measures used to assess implementation of the Uniform Mental Health Services Handbook, access to care, use of evidence-based practices, and veterans' health status. The center also conducts annual VHA provider and veteran satisfaction surveys, an annual assessment of health care diagnosis and treatment trends for VHA patients with SUDs, and monthly assessments of VHA mental health staffing levels, among other evaluations.

National Center for Posttraumatic Stress Disorder

The National Center for Posttraumatic Stress Disorder (NCPTSD), which was created in 1984, consists of seven divisions located at academic centers across the United States (Schnurr, 2014). Each division has a specific focus area (see Table 3-3).

The mission of the NCPTSD is to "advance the clinical care and social welfare of America's veterans and others who have experienced trauma, or who suffer from PTSD, through research, education, and training in the science, diagnosis, and treatment of PTSD and stress-related disorders" (VA, 2016j). The center's accomplishments include development of the Clinician-Administered PTSD Scale, which is considered the gold standard for assessing PTSD; conducting the first VHA multisite study on PTSD; and creating a comprehensive website on trauma and PTSD (www.ptsd.va.gov). The NCPTSD has conducted several research projects on PTSD in veterans of OEF/OIF/OND. Examples include studies of neuropsychological and mental health outcomes following deployment (Vasterling et al., 2006), research on the effectiveness of specific treatments for PTSD (Brief et al., 2013; Lang et al., 2012), and work on predicting postdeployment mental health needs (Vogt et al., 2011).

TABLE 3-3 National Center for Posttraumatic Stress Disorder Focus Areas by Division

Division	Location	Focus
Executive Division	White River Junction, VT	Provides leadership, directs program planning, and promotes collaboration to facilitate the optimal functioning of each division individually and collectively. Specializes in the development of innovative and authoritative educational resources, programs that disseminate and implement best management and clinical practices, and the use of technologies to reach a broad range of audiences.
Behavioral Sciences Division	Boston, MA	Study of the role of behavior in adaptation to traumatic stress to advance knowledge of the mechanisms, course, assessment, and treatment of stress- and trauma-related psychopathology.
Clinical Neurosciences Division	West Haven, CT	Neurobiological, imaging, and genetic studies of the physical basis of traumatic stress, risk and resilience factors, and pharmacotherapy and rehabilitation for PTSD and comorbid conditions.
Women's Health Sciences Division	Boston, MA	Assessment and treatment of the psychological and physical health impact of military service on women as well as of military sexual trauma in men and women.
Evaluation Division	West Haven, CT	Supports the National Center's mission through a programmatic link with VHA's Northeast Program Evaluation Center, which has broad responsibilities within the Office of Mental Health Operations to evaluate their programs, including those for specialized treatment of PTSD.
Dissemination and Training Division	Palo Alto, CA	Research on provider and patient needs and preferences, implementation and effectiveness of evidence-based assessments and treatments in community settings, and development and testing of novel assessments and treatments that exploit the potential unique benefits of technology-based delivery of services to improve access, quality and outcomes in VHA care.
Pacific Islands Division	Honolulu, HI	Improving access to care for active-duty personnel and veterans by improving understanding of cultural attitudes and the use of advanced technology, such as telemedicine, to reach out to veterans unable to access adequate care.

NOTE: PTSD = posttraumatic stress disorder; VHA = Veterans Health Administration; VISN = Veterans Integrated Service Network.
SOURCE: Schnurr, 2014; VA, 2016d.

National Telemental Health Center

The VHA National Telemental Health Center, based in the VHA Connecticut Healthcare System, was created to unify the use of tele-mental health within the VHA. The center works to ensure that tele-mental health is available nationwide, and it strives to increase access to specialty care via telehealth. Furthermore, it convenes panels of experts to help advance the field and acts as a resource bank for best practices (Godleski, 2014). For PTSD treatment, the National Telemental Health Center is promoting the delivery of prolonged exposure therapy and cognitive processing therapy via tele-mental health, particularly to veterans in rural areas where these therapies may not be otherwise available (IOM, 2014).

National Center on Homelessness among Veterans

The VA's National Center on Homelessness among Veterans was established in 2009 and collaborates with the Office of Mental Health and Suicide Prevention to address homelessness among veterans. The center's goal is "to promote recovery-oriented care for veterans who are homeless or at-risk for

homelessness by developing and disseminating evidence-based policies, programs, and best practices” (VA, 2016a). Between 2010 and 2015, efforts by the VA and its partners reduced the estimated number of homeless veterans by 36 percent. According to estimates based on data collected during the annual point-in-time count, conducted on a single night in January 2015, there were fewer than 48,000 homeless veterans in the United States, a decline of more than 26,360 veterans since 2010.²

The center conducts population-based and program-specific research on homelessness and also develops assessment tools. One particular area of this population-based research is mental illness, SUDs, and comorbid conditions (VA, 2016d). For example, VA researchers have studied housing disparities and instability among veterans who have mental illnesses, substance use and housing programs for homeless veterans, and unemployment among homeless veterans (Bossarte et al., 2013; Montgomery et al., 2015; O’Connor et al., 2013; Schinka et al., 2011). A study specific to the OEF/OIF/OND veterans is identifying risk factors for homelessness in this cohort (Metraux et al., 2013). Program-specific research is focusing on patterns of resource use and access to and provision of services as well as on identifying the factors that affect the outcomes of individual program initiatives on homelessness (VA, 2016e). Finally, tools are being developed so that the VA’s homelessness programs can be evaluated and the individual needs of veterans can be effectively assessed (VA, 2016b).

The center also has a program to develop and implement models related to housing, health care, prevention, and supportive services for homeless veterans (VA, 2016a). This program uses interventions developed from research studies and applies them to clinical practice. It also evaluates the efficacy of the interventions through pilot programs.

Finally, the center has an education and dissemination program that “provides education, technical assistance, and consultation to enhance and improve the delivery of services to homeless veterans by sharing evidence-based and best practices with VA and community partners” (VA, 2016c). This program develops treatment manuals and trainings and organizes virtual conferences and webinars to disseminate information.

Social and Community Reintegration Research

The Social and Community Reintegration Research (SoCRR) program is working to increase the VA’s capacity for conducting research on sustaining and recovering “full community involvement by veterans with psychiatric disorders” (VA, 2016i). SoCRR is funded by the VA’s Rehabilitation Research and Development Service under the Research Enhancement Award Program mechanism. The goal of the research program is to improve the understanding of how mental health conditions affect community involvement factors such as education, work, and family and social relationships. The goal is to apply the research findings to clinical practices to assist veterans with their reintegration in the community.

SUMMARY

This chapter has provided a summary of VA programs and services related to mental health care and of major mental health evaluation, research, and support centers that serve to monitor as well as inform clinical practice. The chapter is intended to be solely descriptive. Select programs and services are examined in more detail with regard to access and quality in later chapters. The salient points from this chapter are as follows:

²Personal communication, Stacy Gavin, OMHSP/VA, June 2, 2016.

- The VHA offers an array of recovery-oriented mental health programs for eligible veterans across the country, including programs for SUDs.
- The VHA also provides support services not traditionally found in non-VHA mental health venues, such as services targeting homeless veterans, vocational rehabilitation, and transitional services from federal or state prison to VHA health care.
- Both general and specialty mental health services are offered with a particular emphasis on areas that address the needs of the veteran population (for example, posttraumatic stress disorder and military sexual trauma).
- With few exceptions (for example, the Services for Returning Veterans–Mental Health teams), VHA mental health services have been developed to address the needs of military veterans broadly. Mental health services for the Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn veterans are, for the most part, delivered within the existing mental health system described here.
- VHA mental health services and programs have been developed to create a comprehensive continuum of care from acute, intensive inpatient care to residential rehabilitation and an array of outpatient services.
- In addition to being a direct provider of and payer for services, VHA has a large infrastructure dedicated to supporting and evaluating its programs and services, to conducting research to improve mental health care for veterans, and to training future health care providers (which will be discussed further in another chapter).
- Not all programs and services created by VHA and described in this chapter are available at all sites of VHA care.
 - The types and number of mental health services available at a particular site are determined by such factors as the number of veterans served and their needs and the size and location of the site.
 - The location of services and how those services are delivered (for example, direct care, tele-mental health, or contracts with non-VHA providers) are prescribed by written national policy.
 - In response to the diverse needs of veterans, the range of site size and locations (for example, rural versus urban), and other locally determined factors, a large number of general and specialized mental health programs have been created and are implemented in accordance with local needs.
 - As such, varying subsets of these programs may be available at a particular site.
- Regardless of whether a mental health program is described as general or specialized, a substantial percentage of veterans treated in a given program typically have comorbid mental health conditions. Therefore, virtually all programs have either in-house services or services available by referral to address the complex collection of issues presented by the veteran population.

REFERENCES

- Bossarte, R. M., J. R. Blosnich, R. I. Piegari, L. L. Hill, and V. Kane. 2013. Housing instability and mental distress among U.S. veterans. *American Journal of Public Health* 103(Suppl 2):S213–S216.

- Brief, D. J., A. Rubin, T. M. Keane, J. L. Enggasser, M. Roy, E. Helmuth, J. Hermos, M. Lachowicz, D. Rybin, and D. Rosenbloom. 2013. Web intervention for OEF/OIF veterans with problem drinking and PTSD symptoms: A randomized clinical trial. *Journal of Consulting and Clinical Psychology* 81(5):890–900.
- DoD and VA (Department of Defense and Department of Veterans Affairs). 2011. *DoD/VA integrated mental health strategy (IMHS)*. Washington, DC: Department of Defense and Department of Veterans Affairs.
- Dundon, M., K. Dollar, M. Schohn, and L. J. Lantinga. 2011. *Primary care-mental health integration co-located, collaborative care: An operations manual*. Center for Integrated Care.
- Godleski, L. 2014. *Telemental health in VA: Laying the groundwork for opportunities to access to cognitive behavioral therapy for pain, part 1*. Washington, DC: Department of Veterans Affairs.
- Hoff, R. 2014. NEPEC and PTSD program evaluation. In *Presentation to the Committee to Evaluate the Department of Veterans Affairs Mental Health Services*. New Haven, CT: VA NEPEC.
- IOM (Institute of Medicine). 1996. *Primary care: America's health in a new era*, edited by M. S. Donaldson, K. D. Yordy, K. N. Lohr, and N. A. Vanselow. Washington, DC: National Academy Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- Johnson-Lawrence, V., K. Zivin, B. R. Szymanski, P. N. Pfeiffer, and J. F. McCarthy. 2012. VA primary care-mental health integration: Patient characteristics and receipt of mental health services, 2008–2010. *Psychiatric Services* 63(11): 1137–1141.
- Kearney, L. K., E. P. Post, A. S. Pomerantz, and A. M. Zeiss. 2014. Applying the interprofessional patient aligned care team in the Department of Veterans Affairs: Transforming primary care. *American Psychologist* 69(4):399–408.
- Lang, A. J., P. P. Schnurr, S. Jain, R. Raman, R. Walser, E. Bolton, A. Chabot, and D. Benedek. 2012. Evaluating transdiagnostic treatment for distress and impairment in veterans: A multi-site randomized controlled trial of acceptance and commitment therapy. *Contemporary Clinical Trials* 33(1):116–123.
- Metraux, S., L. X. Clegg, J. D. Daigh, D. P. Culhane, and V. Kane. 2013. Risk factors for becoming homeless among a cohort of veterans who served in the era of the Iraq and Afghanistan conflicts. *American Journal of Public Health* 103(Suppl 2): S255–S261.
- Montgomery, A. E., M. E. Dichter, A. M. Thomasson, C. B. Roberts, and T. Byrne. 2015. Disparities in housing status among veterans with general medical, cognitive, and behavioral health conditions. *Psychiatric Services* 66(3):317–320.
- National Center on Homelessness Among Veterans. 2012. *HUD–VASH resource guide for permanent housing and clinical care*. Washington, DC: Department of Veterans Affairs.
- Nieuwsma, J. A., J. E. Rhodes, G. L. Jackson, W. C. Cantrell, M. E. Lane, M. J. Bates, M. B. Dekraai, D. J. Bulling, K. Ethridge, K. D. Drescher, G. Fitchett, W. N. Tenhula, G. Milstein, R. M. Bray, and K. G. Meador. 2013. Chaplaincy and mental health in the Department of Veterans Affairs and Department of Defense. *Journal of Health Care Chaplaincy* 19(1):3–21.
- O'Connor, K., A. Kline, L. Sawh, S. Rodrigues, W. Fisher, V. Kane, J. Kuhn, M. Ellison, and D. Smelson. 2013. Unemployment and co-occurring disorders among homeless veterans. *Journal of Dual Diagnosis* 9(2):134–138.
- Rosland, A. M., K. Nelson, H. Sun, E. D. Dolan, C. Maynard, C. Bryson, R. Stark, J. M. Shear, E. Kerr, S. D. Fihn, and G. Schectman. 2013. The patient-centered medical home in the Veterans Health Administration. *American Journal of Managed Care* 19(7):e263–e272.
- Schinka, J. A., R. J. Casey, W. Kaspro, and R. A. Rosenheck. 2011. Requiring sobriety at program entry: Impact on outcomes in supported transitional housing for homeless veterans. *Psychiatric Services* 62(11):1325–1330.
- Schnurr, P. P. 2014. The National Center for Posttraumatic Stress Disorder (PTSD). Presented to the Committee to Evaluate the Department of Veterans Affairs Mental Health Services. Washington, DC: VA National Center for PTSD.
- Trafton, J. 2014. Mental health evaluation activities of the VA Program Evaluation and Resource Center. Presented to the Committee to Evaluate the Department of Veterans Affairs Mental Health Services. Palo Alto, CA: Program Evaluation and Resource Center.
- VA (Department of Veterans Affairs). 2010a. *Mental health residential rehabilitation treatment program (MH RRTP)*. VHA Handbook 1162.02.
- VA. 2010b. *VHA directive 1500: Readjustment Counseling Service (RCS) Vet Center Program*. Washington, DC: Department of Veterans Affairs.
- VA. 2010c. *VHA handbook 1160.03: Programs for veterans with post-traumatic stress disorder*. Washington, DC: Veterans Health Administration.
- VA. 2010d. *VHA handbook 1500.01: Readjustment Counseling Service (RCS) Vet Center Program*. Washington, DC: Department of Veterans Affairs.
- VA. 2011. *Specialized mental health centers of excellence fact sheet*. Washington, DC: Department of Veterans Affairs.

- VA. 2012a. *Primary care–mental health integration (PC-MHI) functional tool*. Washington, DC: Department of Veterans Affairs.
- VA. 2012b. *VHA programs for veterans with substance use disorders (SUD)*. VHA Handbook 1160.04.
- VA. 2013. *VHA handbook 1160.06: Inpatient mental health services*. Washington, DC: Department of Veterans Affairs.
- VA. 2014a. *Grant and Per Diem program: FAQs*. http://www.va.gov/homeless/gpd_faq.asp#FAQ3 (accessed November 7, 2014).
- VA. 2014b. *PTSD: National Center for PTSD*. http://www.ptsd.va.gov/about/major-initiatives/divisions-research/evaluation_division_research.asp (accessed October 3, 2014).
- VA. 2014c. *QUERI—Using research evidence to improve practice*. <http://www.queri.research.va.gov/> (accessed October 3, 2014).
- VA. 2014d. *SMITREC*. <http://www.annarbor.hsrdr.research.va.gov/smitrec.asp> (accessed October 6, 2014).
- VA. 2014e. *VA mental health services: Public report*. Washington, DC: Department of Veterans Affairs.
- VA. 2014f. *VHA handbook 1162.09: Health Care for Homeless Veterans (HCHV) program*. Washington, DC: Department of Veterans Affairs.
- VA. 2015a. *MIRECC/COE mental health innovations newsletter*. <http://www.mirecc.va.gov/newsletter/current.asp> (accessed January 8, 2016).
- VA. 2015b. *Patient care services: National Chaplain Center*. www1.va.gov/chaplain (accessed April 24, 2015).
- VA. 2015c. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2016a. *Homeless veterans*. <http://www.va.gov/HOMELESS/nchav/index.asp> (accessed February 1, 2016).
- VA. 2016b. *Homeless veterans: Assessment tools*. <http://www.va.gov/homeless/nchav/research/assessment-tools/assessment-tools.asp> (accessed February 2, 2016).
- VA. 2016c. *Homeless veterans: Education and dissemination*. <http://www.va.gov/homeless/nchav/education/education.asp> (accessed February 2, 2016).
- VA. 2016d. *Homeless veterans: Mental illness, substance abuse, and co-occurring disorders*. <http://www.va.gov/homeless/nchav/research/population-based-research/mental-illness.asp> (accessed February 1, 2016).
- VA. 2016e. *Homeless veterans: Program-specific research*. <http://www.va.gov/homeless/nchav/research/program-specific-research/program-specific-research.asp> (accessed February 2, 2016).
- VA. 2016f. *MIRECC/COE*. <http://www.mirecc.va.gov/index.asp> (accessed January 8, 2016).
- VA. 2016g. *MIRECC/COE VA advanced fellowship in mental illness research and treatment*. https://www.mirecc.va.gov/mirecc_fellowship.asp (accessed August 31, 2016).
- VA. 2016h. *MIRECC/COE: Mental health and chaplaincy*. <http://www.mirecc.va.gov/MIRECC/mentalhealthandchaplaincy/index.asp> (accessed February 11, 2016).
- VA. 2016i. *Office of Research and Development research programs*. <https://www.research.va.gov/programs/default.cfm#rrd-ct> (accessed July 12, 2016).
- VA. 2016j. *PTSD: National Center for PTSD*. <http://www.ptsd.va.gov/about/divisions/index.asp> (accessed January 13, 2016).
- VA. 2016k. *Team-based care—PACT*. <http://www.va.gov/HEALTH/services/primarycare/pact/team.asp> (accessed January 28, 2016).
- VA. 2016l. *Vet Center Program*. <http://www.vetcenter.va.gov/> (accessed March 24, 2017).
- VA. 2017a. *Supportive services for veteran families: General program information and regulations*. https://www.va.gov/homeless/ssvf/index.asp?page=/home/general_program_info_regs (accessed October 6, 2017).
- VA. 2017b. *National network of QUERI programs*. <http://www.queri.research.va.gov/programs/default.cfm> (accessed March 6, 2017).
- VA. 2017c. *COIN: Center for Mental Healthcare and Outcomes Research (CEMHOR), North Little Rock, Ar*. <https://www.hsrdr.research.va.gov/centers/cemhor.cfm> (accessed January 18, 2017).
- VA Office of Inspector General. 2011. *Healthcare inspection: A follow-up review of VHA mental health residential rehabilitation treatment programs (MH RRTP)*. Washington, DC.
- Vasterling, J. J., S. P. Proctor, P. Amoroso, R. Kane, T. Heeren, and R. F. White. 2006. Neuropsychological outcomes of Army personnel following deployment to the Iraq war. *JAMA* 296(5):519–529.
- Vogt, D., R. Vaughn, M. E. Glickman, M. Schultz, M. L. Drainoni, R. Elwy, and S. Eisen. 2011. Gender differences in combat-related stressors and their association with postdeployment mental health in a nationally representative sample of U.S. OEF/OIF veterans. *Journal of Abnormal Psychology* 120(4):797–806.

Clinical Management of Mental Health Conditions at the Veterans Health Administration

The consequences of the Iraq and Afghanistan conflicts on the health and well-being of the wars' veterans are well documented. High-intensity combat, multiple deployments, traumatic injuries, military sexual trauma, and exposure to such stressors as long periods away from home and readjusting to civilian life are among the factors known to increase the risk of mental health problems among veterans who served in Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) (IOM, 2013a; Tanielian and Jaycox, 2008).

Now and into the future the Department of Veterans Affairs (VA) is responsible for managing care for a large number of OEF/OIF/OND veterans who have mental health conditions. As this chapter describes, for many of these veterans the diagnosis is complicated by multiple comorbidities, and while there are many evidence-based treatments that have been validated for specific conditions, there is a lack of evidence identifying effective treatments in the presence of multiple conditions. The chronic nature of many mental health problems will increasingly place demands on the system as the population ages.

In this chapter, the committee provides details about the population at risk for mental health problems and describes the VA health system's clinical management of the leading mental health conditions in OEF/OIF/OND veterans. The conditions discussed include posttraumatic stress disorder (PTSD), generalized anxiety disorder (GAD), major depressive disorder (MDD), substance use disorders (SUDs), suicidal thoughts or behavior, and various comorbid conditions.

The first major section of the chapter describes the nature of mental health in OEF/OIF/OND veterans, including the rates of the leading mental health diagnoses for OEF/OIF veterans and the factors that give rise to mental health problems. For each condition, clinical definitions, prevalence rates, and risk and protective factors are presented. The second major section summarizes VA clinical policies for identifying (screening), assessing, and treating veterans who need mental health care. Chapter 11 presents the evidence that examines whether the VA is effectively providing the recommended treatments to veterans.

MENTAL HEALTH CONDITIONS IN OPERATION ENDURING FREEDOM, OPERATION IRAQI FREEDOM, AND OPERATION NEW DAWN VETERANS

Rates of Diagnosed Mental Health Conditions

Since 9/11, the rates of diagnosed mental health conditions among veterans have challenged mental health resources across the VA as well as in the Department of Defense (DoD) and community systems (Pickett et al., 2015). Among the 1.2 million OEF/OIF/OND veterans who had obtained VA health care through the third quarter of fiscal year (FY) 2015, 58 percent had a mental health diagnosis. The most common diagnoses included PTSD, depressive disorders, disorders characterized by anxiety (for example, generalized anxiety disorder), and substance (alcohol or drugs) dependence or abuse (VA, 2017a). In addition, each of these health conditions is associated with an increased risk of suicidal ideation and behavior (Moyer, 2013).

OEF/OIF/OND veterans are frequently diagnosed with more than one distinct physical health and mental health condition. Common comorbid or overlapping disorders are PTSD, SUDs, MDD, and postconcussive symptoms attributed to mild traumatic brain injury (TBI) (IOM, 2013a). Carlson et al. (2010) examined the rates of clinician-diagnosed psychiatric disorders in a sample of OIF and OEF veterans ($n = 13,201$) and found that over 80 percent of veterans who screened positive for TBI also had psychiatric diagnoses. In an evaluation of VA mental health programs (Watkins and Pincus, 2011), the Altarum–RAND evaluation team examined data for a FY 2008 cohort of 906,394 veterans who had at least one mental health diagnosis (PTSD, major depression, SUD, schizophrenia, and bipolar disorder). Approximately half of the veterans had a mental health diagnosis other than their cohort-qualifying diagnosis¹ (53 percent) or had at least one physical health comorbidity (50 percent), and 23 percent had co-occurring SUDs.

Factors Associated with Mental Health Problems

Many veterans of the Iraq and Afghanistan conflicts do not have any adverse health effects resulting from their military experiences. Others, however, did receive physical or psychological injuries from their war-related experiences (Tanielian and Jaycox, 2008).

Research suggests that a mental health problem may result from multiple, inter-related causes. According to the Stress Vulnerability Model (Zubin and Spring, 1977), three factors contribute to the development (and the course) of psychiatric disorders: vulnerabilities, stressors, and protective factors. Vulnerabilities can be biological (as a result of genetics), or they may be acquired as a consequence of trauma, disease, or family experiences. For example, studies have established the connection between adverse childhood experiences, such as abuse and other family dysfunctions, and poor mental health (for example, PTSD, depression, and suicide) in military members and veterans (see McGuinness and Waldrop, 2015).

Stressors are life events or circumstances that can trigger the onset of a disorder or worsen an existing disorder. Stressors can include experiencing the death of a loved one, a difficult personal relationship, substance abuse, or witnessing violence. *Protective factors* reduce an individual's vulnerability and stress. Protective factors can include medication that controls symptoms, abstention from drugs and alcohol, personal coping skills, social support, and meaningful life structures, such as employment.

¹Cohorts consisted of veterans whose Veterans Health Administration (VHA) use records contained at least one of 38 study-relevant *ICD-9-CM* diagnosis codes for the five study conditions (MDD, PTSD, SUD, schizophrenia, and bipolar disorder) and at least one inpatient episode or two outpatient visits annually for any diagnosis.

Understanding a veteran's risk for mental health problem requires assessing all sources of possible vulnerabilities, resilience (for example, social supports), other health conditions, and relationships.

Military service, which often begins at a relatively young age, is an important developmental experience that can have positive and negative effects throughout adulthood. Theories of life-span development suggest that a health condition observed after military service may have consequences for a wide range of outcomes and can give rise to further difficulties throughout a veteran's life (Kang et al., 2016). For example, a mental health condition that impairs interpersonal functioning negatively alters the way that a veteran interacts with family, friends, and colleagues. The condition may also result in outcomes that significantly shape the veterans future, such as incarceration, substance abuse, and unemployment (Tanielian and Jaycox, 2008).

Clinical Definitions

The definitions for PTSD, GAD, MDD, SUDs, and suicidal thoughts or behavior, derived from the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* (APA, 2013), are summarized below. Differences in the clinical criteria between *DSM-5* and the previous edition, *DSM Fourth Edition, Text Revision (DSM-IV-TR)* (APA, 2000), are noted where applicable because these differences may lead to changes in the number of people that meet the qualifying criteria to receive a diagnosis. The section Prevalence, Risk Factors, and Protective Factors, below, discusses this and other sources of variation in published estimates of mental health disorders in the veteran population.

Posttraumatic Stress Disorder

PTSD is a psychiatric disorder that can develop after the direct personal experience of or the witnessing of an event that poses a perceived threat of death or serious injury (Criterion A, see Table 4-1). *DSM-5* categorizes four different domains of PTSD symptoms: intrusion symptoms (re-experiencing symptoms such as flashbacks, nightmares, and reactivity to trauma reminders) (Criterion B); avoidance of trauma-related thoughts, feelings, or external trauma reminders (Criterion C); negative alterations in cognitions and mood (for example, negative beliefs and emotions, self-blame, and constricted affect) (Criterion D); and arousal and reactivity (for example, hypervigilance, irritability, excessive startle response, sleep disturbance, and concentration difficulties) (Criterion E). The manual states that if the symptoms persist for 3 days to 4 weeks, the diagnosis is acute stress disorder, while if the symptoms endure for more than 1 month, the diagnosis is PTSD.

According to *DSM-5*, the onset of PTSD usually begins within 3 months of exposure to the traumatic event, but it may occur months later. "Delayed expression" refers to cases in which some symptoms appear soon after the trauma but take months (or even years) to meet the full diagnostic criteria (APA, 2013). Military-related traumatic events that may trigger PTSD include exposure to war, threatened or actual physical assault, threatened or actual sexual assault, being taken hostage, torture, incarceration as a prisoner of war, and motor vehicle accidents (APA, 2013). *DSM-5* also includes certain indirect exposures through professional duties, such as clearing body parts, engaging in first-responder activities, and experiencing accidental or violent death of a friend or relative, as possible triggers of PTSD.

Individuals with PTSD often display a heightened startle response in reaction to unexpected stimuli (such as a loud noise or unexpected movement). Additionally, many with PTSD have difficulty remembering daily events and have difficulty concentrating or staying focused on tasks (APA, 2013). PTSD can be chronic and have no remission, or it can be recurrent with periods of remission and recurrence (Friedman, 2013).

TABLE 4-1 Comparison of *DSM-IV-TR* Criteria to *DSM-5* Criteria for Posttraumatic Stress Disorder (PTSD)

PTSD in <i>DSM-IV-TR</i> (Anxiety Disorders Chapter)	PTSD in <i>DSM-5</i> (Trauma- and Stressor-Related Disorders Chapter)
A. Traumatic stressor (need 2 of 2): (1) experienced, witnessed, or was confronted with a traumatic event (2) intense fear, helplessness, or horror ^a	A. Traumatic stressor (need 1 of 4): (1) direct exposure (2) witnessing (3) indirectly, by learning a close relative or close friend was exposed (4) repeated/extreme indirect exposure in the course of professional job (not through media)
B. Re-experiencing symptoms (need 1 of 5): (1) recurrent and intrusive distressing recollections (2) recurrent distressing dreams (3) flashbacks (4) intense psychological distress at exposure to cues (5) psychological reactivity on exposure to cues	B. Intrusion symptoms (need 1 of 5): (1) recurrent, involuntary, intrusive memories (2) recurrent distressing dreams (3) flashbacks (4) intense/prolonged distress at exposure to cues (5) physiologic reactivity upon exposure to cues
C. Avoidance and numbing symptoms (need 3 of 7): (1) efforts to avoid thoughts, feelings (2) efforts to avoid activities, places, or people (3) inability to recall an important aspect of the trauma (4) diminished interest/participation in activities (5) feeling of detachment/estrangement (6) restricted affect (7) sense of a foreshortened future	C. Avoidance symptoms (need 1 of 2): (1) avoidance of trauma-related thoughts/feelings (2) avoidance of trauma-related external reminders
D. Increased arousal symptoms (need 2 of 5): (1) difficulty falling/staying asleep (2) irritability/outbursts of anger (3) difficulty concentrating (4) hypervigilance (5) exaggerated startle response	D. Negative alterations in cognitions and mood symptoms (need 2 of 7): (1) inability to recall key features of the trauma (2) negative beliefs about oneself, the world (3) distorted blame of self, others ^b (4) persistent negative emotional state ^b (5) diminished interest/participation in activities (6) feeling of detachment/estrangement (7) persistent inability to experience positive emotions
	E. Alterations in arousal and reactivity symptoms (need 2 of 6): (1) irritable behavior and angry outbursts (2) self-destructive/reckless behavior ^b (3) hypervigilance (4) exaggerated startle response (5) problems with concentration (6) sleep disturbance

NOTES:

^aRemoved from *DSM-5* criteria.^bNew symptoms in *DSM-5*; symptoms must persist for more than a month for both versions.

SOURCES: Friedman, 2013; Levin et al., 2014.

Table 4-1 shows a comparison of the previously used *DSM-IV-TR* criteria with *DSM-5* criteria. Of note in the *DSM-5* is the elimination of criterion A2 and the splitting of criteria category C into two categories (C and D). Other criteria in categories D and E have been added and are noted in Table 4-1. PTSD has become part of a new *DSM* chapter titled Trauma- and Stressor-Related Disorders and is no longer considered an anxiety disorder, as it was in *DSM-IV-TR*.

Generalized Anxiety Disorder

GAD is characterized by persistent and uncontrollable anxiety and worry. As described below, studies have found high rates of GAD in the veteran population. GAD is one of seven anxiety disorders in *DSM-5*. The six others are separation anxiety disorder, selective mutism, specific phobia, social phobia, panic disorder, and agoraphobia. (PTSD, formerly classified as an anxiety disorder in *DSM-IV-TR*, was reclassified as a trauma- and stressor-related disorder in *DSM-5*.)

The *DSM-5* diagnostic criteria for GAD are as follows: (1) excessive anxiety and worry, occurring more days than not for at least 6 months; (2) the individual finds it difficult to control the worry; (3) in adults, the anxiety and worry are associated with at least three of the following symptoms: restlessness, feeling keyed up or on edge, being easily fatigued, difficulty concentrating, irritability, muscle tension, and sleep disturbance; (4) the anxiety, worry, or physical symptoms cause clinically significant distress or impairment in important areas of functioning; (5) the disturbance is not due to the physiological effects of a substance or medical condition; and (6) the disturbance is not better explained by another medical disorder (APA, 2013).

Major Depressive Disorder

MDD is characterized by a depressed mood most of the day (nearly every day) or a loss of interest or pleasure, or both, accompanied by at least four the following symptoms: marked unintentional weight loss or weight gain; insomnia or hypersomnia; psychomotor agitation or retardation observable by others; fatigue nearly every day; diminished concentration or increased indecisiveness; and recurrent thoughts of death, or suicidal ideation (APA, 2013). According to *DSM-5*, to receive a major depression diagnosis, five of the above symptoms must be present nearly every day for at least 2 weeks and one of the symptoms must be depressed mood or loss of interest or pleasure.

Substance Use Disorders

SUDs include the misuse of intoxicating substances, including alcohol, illicit drugs, prescription drugs, and other toxic agents. A major feature of SUDs is “an underlying change in brain circuits that may persist beyond detoxification, particularly in individuals with severe disorders” (APA, 2013). According to *DSM-5*, “[t]he behavioral effects of these brain changes may be exhibited in the repeated relapses and intense drug craving when the individuals are exposed to drug-related stimuli. These persistent drug effects may benefit from long-term approaches to treatment” (APA, 2013, p. 483).

A diagnosis of a substance use disorder is based on an individual’s pattern of behavior and usage of the substance and is marked by a cluster of cognitive, behavioral, and physiological symptoms. An individual with a substance use disorder will continue using the substance despite the presence of substance-related symptoms and the problems they cause. In *DSM-5*, symptoms associated with a substance use disorder fall into four major groupings: impaired control, social impairment, risky use, and pharmacological criteria (that is, tolerance and withdrawal).

Although the previous definitions of SUDs (for which most prevalence data are currently available) made a distinction between “abuse” and “dependence,” *DSM-5* abandoned this dichotomy and classifies the disorder by severity based on the number of symptoms present: mild substance use disorder (two to three symptoms), moderate substance use disorder (four to five symptoms), or severe substance use disorder (six or more symptoms). Additionally, *DSM-5* removed the criterion for legal problems and added one for cravings. *DSM-5* establishes eight types of substances that these criteria may apply to:

TABLE 4-2 Comparison of *DSM-IV-TR* Criteria to *DSM-5* Criteria for Substance Use Disorders (SUDs)

SUDs in <i>DSM-IV-TR</i>	SUDs in <i>DSM-5</i>
(Substance-Related and Addictive Disorders Chapter)	
A. Substance abuse (need 1 of 4):	A. Substance use disorder (need 2 of 11):
(1) failure to fulfill obligations	(1) unintended use
(2) hazardous use	(2) unsuccessful attempts to reduce or stop use
(3) recurrent legal problems due to use ^a	(3) excessive time spent to obtain, use, and recover from use
(4) continued use despite recurrent social or interpersonal problems	(4) craving or strong desire to use ^b
B. Substance dependence (need 3 of 7):	(5) failure to fulfill obligations
(1) increased tolerance (increased amount; decreased effect)	(6) continued use despite recurrent social or interpersonal problems
(2) experienced withdrawal symptoms	(7) reduction in important social, occupational, or recreational activities
(3) unintended use	(8) hazardous use
(4) unsuccessful attempts to reduce or stop use	(9) continued use despite experiencing adverse consequences
(5) excessive time spent to obtain, use, and recover from use	(10) increased tolerance (increased amount; decreased effect)
(6) reduction in important social, occupational, or recreational activities	(11) experienced withdrawal symptoms
(7) continued use despite experiencing adverse consequences	
	<u>Severity scale:</u>
	Mild: 2–3 symptoms
	Moderate: 4–5 symptoms
	Severe: 6 or more symptoms

NOTES:

^aRemoved from *DSM-5* criteria.^bNew symptom in *DSM-5*; symptoms must persist for more than a year for both versions.

SOURCES: APA, 2013; NIH, 2015.

alcohol; cannabis; hallucinogens; inhalants; opioids; sedatives, hypnotics, or anxiolytics; stimulants; and tobacco (Horvath et al., 2015).

Table 4-2 shows a comparison of the previously used *DSM-IV-TR* criteria with *DSM-5* criteria for SUDs.

Suicidal Ideation and Behavior

The Centers for Disease Control and Prevention (CDC) has developed a uniform classification system for self-directed violence in order to improve public health information in this area (Crosby et al., 2011). The standardized definitions enhanced data quality for public health surveillance, research, and clinical management purposes. The VA has adopted CDC's nomenclature for self-directed violence (Brenner et al., 2011a).

According to CDC, suicidal thoughts and suicidal behavior should be addressed separately because these two aspects of self-directed violence “are vastly different in occurrence, associated factors, consequences, and interventions” (Crosby et al., 2011, p. 23). Along these lines, CDC considers terms which refer simultaneously to thoughts and behavior, such as “suicidality,” unacceptable in the self-directed violence nomenclature.

In CDC's nomenclature, the term suicidal ideation is used to describe a person's thoughts of engaging in suicide-related behavior that may or may not involve suicidal intent. Suicidal behavior is "acts or preparation towards making a suicide attempt" or behavior that "deliberately results in injury or the potential for injury to oneself" with evidence of suicidal intent. The precise definition of suicide is "death caused by self-directed injurious behavior with any intent to die as a result of the behavior" (Crosby et al., 2011).

The *DSM* has never included a separate diagnostic category for suicidal ideation or behavior. *DSM-5* (APA, 2013) states that suicidal behavior disorder as a condition warrants more research before it might be considered a formal disorder. Discussions of suicide risk are spread throughout the *DSM-5* within various disorders to highlight suicide risk as a cross-cutting issue of mental disorders.

Prevalence, Risk Factors, and Protective Factors

There is widespread variation in published estimates of mental health disorders in the veteran population (see Ramchand et al., 2015, for a comprehensive summary of the epidemiology of mental health problems among Iraq and Afghanistan war veterans). Variations in prevalence estimates might be explained by study design factors, such as differences in the methods and diagnostic criteria used to identify cases as well as differences between samples in the subjects' level of combat exposure, military occupation, and time and place of deployment (Ramchand et al., 2015). The discussion of different studies may also confound 30-day, 12-month, and lifetime prevalence rates. Another factor in prevalence estimates is that findings from mental health studies that use VA patient data may not be generalizable to all veterans because a large number of veterans do not receive mental health care at VA facilities, and there are significant sociodemographic differences and observed differences in behaviors between veterans who use the VA and those who do not use it (SAMSHA, 2016). Comparisons between the veteran and non-veteran populations may be misleading if prevalence rates do not control for demographic factors.

Table 4-3 shows the prevalence rates for PTSD, GAD, MDD, and SUDs and the suicide rates in the veteran and non-veteran populations. For purposes of comparison, Table 4-3 reflects data from the National Survey on Drug Use and Health (NSDUH) (SAMHSA, 2015, 2016). NSDUH uses a nationally representative dataset to produce estimates of substance use and mental health issues among veterans and non-veterans and to provide comparisons that adjust for the significant demographic differences between these populations. More details about the prevalence rates in Table 4-3 and a discussion of risk factors and protective factors for each condition follow.

Posttraumatic Stress Disorder

Prevalence

The prevalence of PTSD has been widely documented in U.S. service members after their deployments during the recent operations in Iraq and Afghanistan. In stark contrast with the U.S. general population, where lifetime prevalence of PTSD estimates are about 7 percent (Kessler et al., 2005), the VA's National Center for PTSD estimates that between 11 and 20 percent of OEF/OIF veterans have PTSD in a given year (VA, 2015a). This figure is consistent with a recent Institute of Medicine (IOM) report on PTSD in military and veteran populations that reported PTSD prevalence estimates of 13 to 20 percent among service members who have served since 2001 (IOM, 2014b). However, a more recent study by the VA estimates that, on average, 23 percent of these veterans have received a diagnosis of PTSD (Fulton et al., 2015). Few studies that have examined the question of how the change in PTSD

TABLE 4-3 Prevalence of Mental Health Conditions and Suicide Rates in Veteran and Non-Veteran Populations

	Veteran Population (%)	Non-Veteran Population (%)
PTSD	11–23 ^{a, b, c}	6.8 ^d
GAD	8–12 ^{e, f}	6 ^f
MDD	4.7–6.5 ^{g, h}	4.6 ^g
SUD	6.6–12.7 ⁱ	8.6 ⁱ
Alcohol	6.3 ^g	6.4 ^g
Any Illicit Drug	8.4 ^g	10.5 ^g
Marijuana	6.3 ^g	7.8 ^g
Pain Relievers/Opioids	2.4 ^g	3 ^g
Suicide Rate	35.3/100,000 ^j	15.2/100,000 ^j

NOTES: Suicide rates were not adjusted for age and sex. GAD = generalized anxiety disorder; MDD = major depressive disorder; PTSD = posttraumatic stress disorder; SUD = substance use disorder.

SOURCES:

^aVA, 2015a.

^bIOM, 2014b.

^cFulton et al., 2015.

^dKessler et al., 2005.

^eBarrera et al., 2014.

^fMilanak et al., 2013.

^gSAMHSA, 2016.

^hManagement of Major Depressive Disorder Working Group, 2016.

ⁱVA/DoD, 2016; SAMHSA, 2015.

^jVA, 2016a.

criteria from the *DSM-IV-TR* to the *DSM-5* (shown in Table 4-1) affected the number of people who meet the qualifying criteria to receive a PTSD diagnosis, and the few studies that exist have reported varying results. Both Miller et al. (2013) and Kilpatrick et al. (2013) estimated that using *DSM-5* criteria would yield a lower prevalence of PTSD. On the other hand, O'Donnell et al. (2014) found rates of PTSD were higher when using the *DSM-5* criteria, although the difference was not statistically significant. And Zoellner et al. (2013) concluded that the criteria changes were not likely to alter the overall prevalence of people receiving a PTSD diagnosis at all, but suggested that the changes might affect the heterogeneity of the individuals receiving a *DSM-5* diagnosis.

Risk Factors

Many risk factors are associated with an increased likelihood of PTSD in men and women who were members of the armed forces. Specifically, the IOM (2013a) reported that being under age 25, being single, and being of junior rank are risk factors for PTSD in OEF and OIF service members and veterans (Lapierre et al., 2007; Phillips et al., 2010; Seal et al., 2009). On the other hand, National Guardsmen over age 40 had significantly higher risks of PTSD (adjusted relative risk = 1.18; 95% confidence interval [CI] = 1.11–1.27) than National Guard and Reserve veterans under age 25 (adjusted for gender, age group, race/ethnicity, marital status, rank, service branch, multiple deployments, and time period) (Seal et al., 2009). Among those who deployed, the IOM (2013a) reported that combat exposure, certain deployment-related stressors (such as troubles at home, lack of privacy, and problems with leadership),

military sexual trauma, prior traumatic experiences, a history of psychological health conditions, and severe physical injury were all risk factors for PTSD. These are discussed individually below.

Combat Exposure

Combat exposure is a well-known risk factor for PTSD in veterans. In their review of 29 studies of OEF and OIF military personnel, Ramchand et al. (2010) found that the only factor that was consistently significantly associated with PTSD was combat exposure and that other factors that often appear to be associated with PTSD may simply be surrogates of combat exposure. Vasterling et al. (2010) found that deployed soldiers who had high combat exposure (according to the Deployment Risk and Resilience Inventory [DRRI] scale) showed the greatest increase in PTSD symptoms. Similarly, using the DRRI, Barrera et al. (2013) found that those veterans who reported higher levels of combat exposure were likely to be subsequently diagnosed with PTSD (odds ratio = 1.17; 95% CI = 1.10-1.25).

The types of combat experiences that are associated with an increased risk of PTSD include killing someone (Maguen et al., 2011), the threat of personal harm (Kolkow et al., 2007; Peterson et al., 2010; Phillips et al., 2010), witnessing someone from one's unit or an ally unit being seriously wounded or killed, and experiencing "friendly" fire (Pietrzak et al., 2011). Severe combat stressors that are specific to this OEF/OIF/OND cohort of veterans "include an increased number of unpredictable insurgent attacks in the form of suicide and car bombs, improvised explosive devices (IEDs), sniper fire, and rocket-propelled grenades" (IOM, 2012, p. 2).

Deployment-Related Stressors

Deployment and deployment-related stressors, including concerns back home, issues with leadership, and lack of privacy, have been associated with an increased risk of PTSD (Booth-Kewley et al., 2010; Seal et al., 2009). The IOM notes that stressors such as longer deployments, multiple deployments with shorter rest and recovery times between deployments, and greater time away from base camp are also risk factors for PTSD (IOM, 2012). Moreover, some investigations have indicated that National Guard soldiers, who often do not benefit from being located near military installation amenities and supportive communities, suffer disproportionately from deployment (Milliken et al., 2007; Thomas et al., 2010). Deployment-related factors associated with National Guardsmen and PTSD (and depression) include financial hardships, job loss, and a lack of employer support (Riviere et al., 2011).

Military Sexual Trauma

Military sexual trauma (MST) is defined by the VA as "sexual assault or repeated, threatening sexual harassment that occurred while the Veteran was in the military" (VA, 2015b), and it appears to be a notable risk factor for PTSD (Dutra et al., 2011; Himmelfarb et al., 2006; Maguen et al., 2012; Suris and Lind, 2008; VA, 2015b).

A representative sample of 108,478 service members found that in 2012, 6.1 percent of active-duty women and 1.2 percent of active-duty men experienced unwanted sexual contact, defined as sexual touching only, attempted or completed intercourse, or attempted or completed anal or oral sex (DoD, 2013). Sixty-seven percent of the women (among the 6.1 percent) and 73 percent of the men (among the 1.2 percent) reported that the unwanted sexual contact had occurred at their military installations, while 19 percent of women (of the 6.1 percent) and 26 percent of men (of the 1.2 percent) reported

that the unwanted contact had occurred while they were deployed to a combat zone. Thirty-three percent of the women and 10 percent of the men who experienced unwanted sexual contact reported the incident to a DoD authority (DoD, 2013). Data solely from OEF/OIF veterans screened at the VA suggests that 15.1 percent of women and 0.7 percent of men using VA services reported MST (Kimerling et al., 2010).

After reviewing electronic medical records of 108,149 male and 17,580 female OEF and OIF veterans, Kimerling et al. (2010) found that those who were victims of MST were significantly more likely to have received a PTSD diagnosis and to have other psychological health disorders (for example, depression, other anxiety disorders, and substance use disorders) than those who did not have a history of abuse. The odds ratios remained significant even after adjustment for other significant associations. LeardMann et al. (2013a) examined the risk factors associated with sexual assault or harassment in a cohort of 13,262 active- and reserve-component women. The authors found that women who were deployed and experienced combat reported the highest cumulative 3-year incidence of sexual harassment (19.9 percent) and assault (4.0 percent). Being born in 1980 or later, prior sexual stressors, being recently divorced, and having prior psychological health disorders were also associated with an increased risk of experiencing sexual assault or harassment (or both).

Other Risk Factors

Traumatic experiences prior to joining military. Veterans who had traumatic experiences prior to experiencing combat appear to be more susceptible to developing PTSD than those who do not have such a history. Phillips et al. (2010) found that two or more exposures to violence before entering the military increased the likelihood of screening positive for PTSD. Also, multiple studies have found an association between adverse childhood experiences—such as physical, sexual, and psychological abuse or exposure to a person in the home who was mentally ill, an alcoholic, or violent—and the psychiatric symptoms of PTSD, anxiety, or depression (Cabrera et al., 2007; Dedert et al., 2009; Fritch et al., 2010; Gahm et al., 2007).

A history of psychological health conditions. Military personnel who were diagnosed with a psychological health condition, particularly PTSD, prior to deployment are at greater risk for a repeat diagnosis in theater (Larson et al., 2011). Using self-report data, Sandweiss et al. (2011) assessed the relationship between postdeployment PTSD and predeployment (baseline) psychiatric conditions and injury severity among 22,630 military personnel who had been deployed to Iraq or Afghanistan. PTSD was found to be significantly associated with baseline psychiatric conditions; service members who had one or more baseline psychiatric conditions were 2.52 times more likely to report PTSD symptoms than those who had no baseline psychiatric conditions.

Injury severity and neurologic dysfunction. The conflicts in Iraq and Afghanistan have left veterans with serious IED blast injuries that often coincide with mild traumatic brain injury and ultimately, an increased risk of developing comorbid PTSD (IOM, 2014b). Grieger et al. (2006) evaluated seriously injured soldiers and found that severe physical problems were significantly associated with PTSD. MacGregor et al. (2009) also observed a positive association between injury severity and PTSD and other psychological health diagnoses. While not all studies have shown a link between PTSD and the severity of an injury, there are still numerous links noted between injuries in general and an increased risk of PTSD (Koren et al., 2005). The committee notes that when measuring the association between an exposure and an outcome, these findings are not necessarily causal.

Protective Factors

Besides the many risk factors noted above, there is also some evidence of protective/resilience factors that have decreased the risk of PTSD. Protective factors for PTSD include good leadership, unit support, training, positive deployment experience, and organizational commitment while in the military (Booth-Kewley et al., 2013; IOM, 2012). Additionally, Polusny et al. (2011) found postdeployment social support to be a significant protective factor, specifically for National Guard soldiers.

Generalized Anxiety Disorder

Prevalence

Studies from the early years of the conflicts showed elevated rates of GAD in veterans following deployment to Iraq and Afghanistan (Hoge et al., 2004). More recently, Barrera and colleagues (2014) examined VA-wide patient data for 292,244 veterans, looking for those veterans who had received a new anxiety disorder diagnosis in fiscal year 2010 and reported that about 8 percent of patients had received a GAD diagnosis. Also, in a sample of 884 veterans from primary care clinics in four VA medical centers (VAMCs), Milanak et al. (2013) found that veterans had a greater risk for developing GAD than civilians; 12 percent of veterans met the diagnostic criteria for GAD, which is twice that found in civilian primary care settings.

Despite the high rates of GAD among veterans, research and data specifically about GAD in the veteran population are lacking. This is in part because study designs have often grouped the various anxiety disorders together (reflecting the older diagnostic criteria in *DSM-IV-TR*) or grouped anxiety with other mental health conditions. Robust information about GAD is also impeded by the non-existence of VA clinical practice guidelines for anxiety and the lack of a policy for standardized screening; by contrast, there is standardized screening in VA primary care settings for PTSD, MDD, and SUD.

Improved detection, diagnosis, and treatment of anxiety disorders within VA primary care settings would be helped by the development of clinical guidance, routine standardized screening, and procedures for the appropriate referral of veterans based on anxiety type and severity level (Barrera et al., 2014; Milanak et al., 2013).

Risk and Protective Factors

Risk factors for GAD include female gender, lower socioeconomic class, and experiencing adversity in childhood (such as physical or sexual abuse, neglect, or living in a household with alcoholism, drug use, or interpersonal violence). Physical punishment in childhood is also associated with an increased risk of GAD in adulthood. Strong social support and a stable childhood are protective factors for GAD later in life. Many of these risk and protective factors are not specific to GAD and are also factors for other anxiety and mood disorders (Stein and Sareen, 2015).

Major Depressive Disorder

Prevalence

According to combined 2005 to 2012 data collected from the National Survey on Drug Use and Health, there were no overall differences between veterans and non-veterans in past-year major depressive episodes (4.7 versus 4.6 percent, respectively); however, differences were seen by age group. The

percentages of veterans with a major depressive episode were 9.6 percent among those aged 18 to 25 and 7.7 percent among those aged 26 to 54; these rates are higher than the percentages of non-veterans in the same age groups, 6.9 and 6.1 percent, respectively (SAMSHA, 2016). Among veterans served by the VA, the prevalence of MDD is somewhat higher at 6.5 percent (Management of Major Depressive Disorder Working Group, 2016).

Risk Factors

The factors that increase one's risk for depression can be genetic, biological, environmental, and psychological, and they often act together in various combinations (VA, 2011). Among U.S. military personnel, Gadermann et al. (2012) found that being female, young (17 to 25 years old), unmarried, and having less than a college education increased the likelihood of depression. Other risk factors that have been reported in the literature include military sexual trauma and childhood physical abuse and other adverse childhood experiences (Cabrera et al., 2007; Fritch et al., 2010; Kimerling et al., 2010; Suris and Lind, 2008). Having been on a deployment and exposure to combat have also been shown to be associated with a diagnosis of depression (Gadermann et al., 2012; IOM, 2013a; Wells et al., 2010).

Substance Use Disorder

Prevalence

Misuse of alcohol and drugs has been a problem for many generations of veterans, including the OEF/OIF cohort. Veterans of the Iraq and Afghanistan wars have a higher risk of substance use disorders compared with military personnel who never deployed or were not deployed in those conflicts (Kelsell et al., 2015). According to the 2013 National Survey on Drug Use and Health (SAMSHA 2015), 1.5 million veterans aged 17 or older, 6.6 percent of this population, had a substance use disorder in the past year, whereas the national average among persons aged 17 or older was 8.6 percent. Notably, the rate of substance use disorders among post-9/11 veterans was 12.7 percent, which is higher than the rate for veterans of other eras (which range from 3.7 to 6.7 percent depending on the era) and the national average.

Data on types of substances from the National Survey on Drug Use and Health (using 2002 to 2012 data) found that among all adults, past-year prevalence was lower for veterans than for non-veterans for illicit drug use (8.4 versus 10.5 percent), marijuana use (6.3 versus 7.8 percent), and non-medical use of pain relievers (2.4 versus 3.0 percent) after adjusting for age, gender, and race/ethnicity. The lower prevalence for veterans as compared with non-veterans for these substance use measures was found only among males; female veterans and nonveterans had similar substance use estimates. Compared to their non-veteran counterparts, younger veterans are at greater risk of abusing alcohol and drugs: veterans aged 18 to 25 had higher past-year rates of alcohol abuse or dependence (19.1 versus 21.2), non-medical use of pain relievers (12.9 versus 14.8 percent), and methamphetamine use (1.4 versus 2.3 percent).

Risk Factors

Among those who have served in the military, there are a large number of risk factors for substance abuse and misuse. Notably, the nature of the military itself and military culture can contribute to an increased risk for substance abuse/misuse (for example, exposure to stressful and traumatic events, serious injuries, combat involvement, multiple deployments, camaraderie around the availability of alcohol on or near bases, etc.) (IOM, 2013a,b). Furthermore, SUD can be comorbid with many of the

other conditions commonly found in this cohort of veterans, such as PTSD, depression, and TBI (IOM, 2014b). Similarly, the many veterans who had wartime injuries and survived often have medical conditions that lead them to receive frequent prescriptions for controlled substances, which further increases the risk for addiction or misuse among this group (IOM, 2013b). Demographically, at-risk substance abusers tend to be young, single, male veterans or members of the National Guard or Reserve (IOM, 2013b; Seal et al., 2011).

Protective Factors

There has not been much research on protective factors for alcohol and substance use disorders, particularly in military and veteran populations. However, an IOM study that focused on SUDs in the Armed Forces reported that factors such as resiliency, attachment, positive temperament, having a support system, and religiosity all can help to mediate or moderate the risk (IOM, 2013b). Similarly, a study of war veterans from Bosnia and Herzegovina found that stronger religious moral beliefs result in “a healthier and more efficient mechanism of tobacco and alcohol misuse control” (Hasanovic and Pajevic, 2010). Green and colleagues (2014) also found in a sample of Iraq and Afghanistan veterans that increased psychological resilience served as a protective factor against alcohol misuse over time.

Suicidal Ideation and Behavior

Prevalence

In July 2016, the VA released updated statistics about veteran suicide (VA, 2016a). It estimated there were 7,403 suicides among veterans in 2014, an average of 20 veteran suicides per day. That figure replaces prior VA estimates of 22 veteran suicides a day, which had been called into question on the basis of the data limitations cited in the earlier report (Kemp and Bossarte, 2012). The recent comprehensive analysis included more than 50 million veterans’ records from 1979 to 2014 from every state.

The VA study found that the highest suicide rates occur among veterans who do not participate in the VA’s mental health programs; on average, in 2014, 6 of the estimated 20 veterans who died from suicide each day were users of VA services. The study also found that two-thirds of all veteran deaths from suicide were the result of firearm injuries. The suicide rate among all veterans was 35.3 per 100,000 people and the rate of suicide among U.S. civilian adults was 15 per 100,000 people. When compared to their non-veteran peers, most veterans are at an increased risk for suicide. After adjusting for differences in age and gender, risk for suicide was 21 percent higher among veterans when compared to U.S. civilian adults. Both male and female veterans are more likely to commit suicide than their U.S. civilian counterparts. In 2014, the rate of suicide among veteran males was 37.0 per 100,000, while the rate of suicide among civilian adult males was 26.2 per 100,000. Among veteran females, the rate of suicide was 18.9 per 100,000 and the rate of suicide among civilian adult females was 7.2 per 100,000 (VA, 2016a).

A recent study of veteran and military personnel suicide looked at suicide patterns by county and state in an effort to determine potential focal points for prevention efforts (Logan et al., 2016). Researchers used data from the National Violent Death Reporting System from 2005 to 2012 from 16 states. Suicide decedents between 18 and 35 who had ever served in the military were included in the analysis (1,178 veterans out of a total of 2,026). One-third of all veteran suicides occurred in 33 high-density counties (out of 963 total counties), 28 of which had VA facilities. Another third of veteran suicides occurred in 93 medium-density counties. The authors suggest that focusing suicide prevention efforts by county may be beneficial.

Risk Factors

Risk factors for suicide and suicidal ideation are often concurrent with risk factors for PTSD, depression, and SUD; in fact, having a diagnosis of any of these illnesses can be a risk factor for suicidal behavior (Britton et al., 2012; Ilgen et al., 2012; IOM, 2013a; LeardMann et al., 2013b; Lemaire and Graham, 2011). Furthermore, studies have found that the risk factors for suicide in the OEF/OIF veteran population include being an older veteran, having experienced prolonged combat or a combat injury, and having a diagnosis of TBI or a psychiatric disorder (Bruce, 2010; Kang and Bullman, 2009). A more recent study by Kang et al. (2015) found that “in both male and female veteran groups, the suicide risk was higher among younger, white, unmarried, enlisted, and Army/Marine veterans” (p. 98) and that deployment was not a contributing factor. Having a history of traumatic brain injury has also been shown to contribute to an increased risk of suicide (Brenner et al., 2011b; Bryan and Clemans, 2013).

Protective Factors

The protective factors that decrease the likelihood of suicide are not as well studied as its risk factors, and most of the research has been carried out in civilian populations. However, the most recognized protective factors include social support, including strong interpersonal bonds with family members and unit members and responsibility to one’s family; psychological factors, such as resilience, good impulse control, and good problem-solving skills; and receiving psychological health treatment (Bryan and Hernandez, 2013; Nock et al., 2013; VA and DoD, 2013). In military populations, unit cohesion is one example of social support that buffers against the adverse effects of stress, the development of PTSD, and potentially suicidal behavior (Brailey et al., 2007). In a 3-year longitudinal study of veterans, resilience (being able to thrive in the face of adversity) was found to protect against suicidal thoughts and suicide attempts (Youssef et al., 2013a). In a related study of Iraq/Afghanistan-era military and veterans, resilience was found to be negatively associated with depressive symptoms and suicidal ideation (Youssef et al., 2013b). Spirituality or some sort of religious faith can also be a protective factor for suicide and suicide ideation as well as for stress-related disorders, depression, and substance abuse (Bonelli and Koenig, 2013; Bryan et al., 2015; Kopacz, 2014).

SCREENING, ASSESSMENT, AND TREATMENT

This section reviews the clinical practices the VA employs for identifying (screening), assessing, and treating veterans who need mental health care. Regarding prevention practices, the committee notes that two previous IOM committees had examined the evidence pertaining to DoD and VA programs that target prevention of mental problems. IOM (2012) found that no PTSD prevention programs have evidence for their effectiveness in preventing or reducing PTSD or stress in service members or their families. In examining broad-based, universal prevention efforts aimed at military service members and their families to reduce mental health and relationship problems, IOM (2014a) found that most of the available interventions have been developed and tested in civilian communities and lack evidence of their effectiveness for military families. Nonetheless, mental health screening, discussed below, as well as other strategies employed by the VA discussed throughout the report, such as integration of mental health in primary care, complementary and alternative approaches to wellness, peer-support models, and suicide prevention programs, support early detection of risks for mental illness and allow for timely interventions to promote health and well-being.

TABLE 4-4 Example of the Scope of Mental Health Practice for Five Main Types of Health Care Providers

Type of Provider	Mental Illness–Related Scope of Practice			
	Diagnoses Mental Health Disorders	Provides Psycho-social Treatment	Does Psychological Testing	Prescribes Medicines
Licensed clinical social worker (LCSW)	X	X		
Clinical psychologist	X	X	X	^a
Marriage and family therapist (MFT)/ licensed professional counselor (LPC)	X	X		
Psychiatrist	X	X		X
Advanced practice psychiatric nurse (APPN)	X	X		X
Primary care provider (PCP) (physicians, advanced practice registered nurses, and physician assistants)	X	X		X

NOTES:

^aIn New Mexico, Louisiana, Guam, the U.S. Department of Defense (DoD) system, the Indian Health Service, and the U.S. Public Health Service, licensed psychologists who obtain additional training can apply to have prescription writing privileges as part of their scope of practice.

SOURCES: CRS, 2015; Dundon et al., 2011.

This section begins with an overview of the clinical guidance that the VA uses for the management of mental health conditions in veterans, then follows that with a summary of VA processes for identifying and diagnosing veterans with mental health conditions. The evidence-based treatments recommended for each mental health diagnosis are outlined at the end of the section.

VA employs various types of providers to deliver mental health services to veterans. Table 4-4 shows the scope of practice for the types of providers who deliver mental health services to patients at the VA. Chapter 8 discusses workforce issues and the availability of providers within the VA.

Clinical Practice Guidelines in the Department of Veterans Affairs

The VA collaborates with DoD and other professional organizations to develop clinical practice guidelines (CPGs)² for the management of a number of different physical health and mental health conditions. The guidelines document evidence-based procedures for the screening, assessment, diagnosis, and treatment of adults who are seen in any VA or DoD clinical setting. VA/DoD joint guidelines exist for the four conditions addressed in this report, PTSD, MDD, SUD, and suicide risk. They are, respectively: *VA/DoD Clinical Practice Guideline for the Management of Post-Traumatic Stress Disorder* (VA and DoD, 2010), *VA/DoD Clinical Practice Guideline for the Management of Major Depressive Disorder* (Management of Major Depressive Disorder Working Group, 2016), *VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders* (Management of Substance Use Disorders Work Group, 2015), and *VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide* (VA and DoD, 2013).

The VA/DoD guideline development process, documented in *Guideline for Guidelines* (VA, 2016b), follows external standards for clinical guideline management, such as those published by the IOM (IOM,

²CPGs are statements and recommendations for clinical care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options.

2011) and by the Guidelines International Network (Qaseem et al., 2012). For example, the VA/DoD guideline process is well defined and structured, and the project team includes guideline champions and other subject-matter experts who are required to make conflict-of-interest disclosures. In addition, the evidence reviews use standardized systems to grade the strength of the evidence³ for recommendations, and a peer-review process involves experts from outside organizations.

VA/DoD guidelines are routinely updated, typically every 3 to 5 years, or sooner if major changes in evidence occur (VA, 2016b). The 2009 editions of the VA/DoD MDD and SUDs guideline were updated in 2016 and 2015, respectively, and reflect *DSM-5* clinical criteria that are described in a previous section of this chapter. At the time of the writing of this report, an update to the 2010 VA/DoD PTSD guideline (which is based on the former PTSD criteria in *DSM-IV-TR*) was in progress. The VA/DoD guideline for the assessment and management of patients at risk for suicide, published in 2013, is the first VA/DoD CPG related to suicide risk.

Mental Health Screening and Assessment in the Department of Veterans Affairs

Within the Veterans Health Administration (VHA) of the VA, patients are screened for the signs and symptoms of mental health problems. Those who have a positive result on a screening test are evaluated further and, if found to have a mental health problem, offered treatment.

VA policy requires that all new patients seen in the VA health system be screened for PTSD, MDD, and alcohol misuse. There is no evidence for the value of universal screening for substances other than alcohol and tobacco (Lanier and Ko, 2008; Saitz et al., 2014), so the VA endorses targeted case-finding methods to identify patients who use illicit drugs or misuse prescription or over-the-counter agents (VA, 2015c).⁴ Positive screens for PTSD or MDD, in particular, are followed by a suicide risk assessment to confirm suspected suicide risk (Management of Major Depressive Disorder Working Group, 2016; VA and DoD, 2010). Patients in primary care are rescreened annually for PTSD, MDD, and alcohol misuse, unless there is a clinical need for more frequent assessment.

The VA identifies those who are at risk for a mental health condition using various brief screening instruments that have been validated in studies of veteran populations (IOM, 2013a). Use of the screening instruments is facilitated by a clinical reminder system at the point of care that is embedded in the electronic medical record (VA, 2007). Clinicians accessing a veteran's medical record are prompted to complete the screening tests that are appropriate for that patient based on his or her medical history. Table 4-5 summarizes the frequency of health screening and the screening instruments commonly used for each of the mental health conditions addressed in this report.

It is worth noting that in many cases the first contact that OIF/OEF/OND veterans have with the VA is through a compensation and pension examination (C&P exam), which is a necessary step in the process of obtaining disability benefits from the Veterans Benefits Administration (VBA). C&P exams differ from standard clinical examinations in the VA, as their core function is to provide VBA staff with the evidentiary foundation with which a claim for a service-connected disability can be rated or denied (IOM and NRC, 2007). The focus of the C&P exam is on data collection rather than on the medical management of a veteran's health condition; there is no formal connection between VBA evaluations for service-connected PTSD claims and the VA assessments of the need for treatment. Some argue that the VA

³Depending on the guideline, the evidence rating system is either the U.S. Preventive Services Task Force (USPSTF) system or the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system.

⁴Methods include an evaluation of the signs and symptoms of substance use in patients with other relevant conditions, such as other mental health disorders, hepatitis C, or HIV disease.

TABLE 4-5 Mental Health Screening in the VA

	PTSD	MDD	Alcohol Misuse	Suicide Risk
Frequency	All new patients seen at a VA medical facility. Annual rescreen for the first 5 years and every 5 years after that.	All new patients seen at a VA medical facility. Annual rescreen for patients seen in a primary care setting.	All new patients seen at a VA medical facility. Annual rescreen for patients seen in primary care, medical specialty, and mental health care settings.	Mandatory screening for suicide risk if a patient screens positive for PTSD or MDD. ^a
Instrument	The Primary Care PTSD Screen (PC-PTSD) (Prins et al., 2004) is incorporated into the VHA clinical reminder system.	Patient Health Questionnaire-2 (PHQ-2) (Kroenke et al., 2003) is incorporated into the VHA clinical reminder system.	Alcohol Use Disorders Identification Test Consumption (AUDIT-C) ^b (Bush et al., 1998) is incorporated into the VHA clinical reminder system.	Instruments used can vary widely across the VA system (Doran et al., 2016).

NOTES: MDD = major depressive disorder; PTSD = posttraumatic stress disorder; VA = Department of Veterans Affairs; VHA = Veterans Health Administration.

^aAccording to the U.S. Preventive Services Task Force, suicide risk screening is more productive for high-risk individuals with known mental illnesses or substance use disorders; there is insufficient evidence to support suicide risk screening for the general population in a primary care setting (O’Conner et al., 2013).

^bThe VA/DoD guideline recommends annual screening with either the AUDIT-C or the Single-Item Alcohol Screening Questionnaire (SASQ) recommended by NIAAA (2008).

SOURCES: Management of Major Depressive Disorder Working Group, 2016; Management of Substance Use Disorders Work Group, 2015; VA, 2010; VA and DoD, 2013.

may be missing opportunities to provide treatment to veterans and that the VA should make it a priority to engage veterans in treatment as part of the VBA compensation examination process (Rosen, 2010).

VA clinical standards indicate that a veteran with a positive result on a mental health screening test receives a comprehensive clinical assessment, performed by a mental health professional, to evaluate symptoms, symptom severity, and effects on daily functioning. VA/DoD CPGs recommend various evidence-based instruments to assist a clinician in confirming a suspected mental health condition and determining the diagnosis (IOM, 2013a); however, the choice of the assessment instrument is up to the care provider. The section at the end of this chapter, Assessment of Clinical Practices for Screening, Assessment, and Treatment in the VA, summarizes findings from recent evaluations of the VA’s implementation of health screening and assessment standards discussed above. The following is a brief description of the clinical assessment instruments recommended by the VA/DoD guidelines for each condition addressed in this report.

Posttraumatic Stress Disorder

For making a diagnosis of PTSD, VA/DoD guideline recommendations include using the Clinician-Administered PTSD Scale (CAPS), considered the gold standard for diagnosing PTSD, and a self-report instrument known as the PTSD Checklist (PCL). The 2010 VA/DoD PTSD guideline pre-dates the release of revised PTSD clinical criteria in *DSM-5*; consequently, the guideline refers to CAPS and PCL versions corresponding *DSM-IV-TR* criteria. The updated instruments, CAPS-5 (Weathers et al., 2013a) and PCL-5 (Weathers et al., 2013b), support a PTSD diagnosis on the basis of *DSM-5* diagnostic criteria.

The National Center for PTSD reports that the change in the rating scale for the PCL combined with the increase from 17 to 20 items means that PCL-5 scores are not compatible with PCL for *DSM-IV* scores and cannot be used interchangeably. Psychometric work on the PCL-5 to determine the scoring thresholds is in process. Although the National Center for PTSD gives initial scoring guidelines, it cautions that the information may be subject to change until further psychometric work is available (National Center for PTSD, 2014).

Major Depressive Disorder

The VA/DoD guideline for depression management recommends that clinicians assess patients who are diagnosed with depression using the Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al., 2001). PHQ-9 is a validated self-report or interviewer-administered instrument that serves as an indicator of depression severity or of a patient's response to treatment. The PHQ-9 is integrated into the VA clinical reminder system, which prompts clinicians to perform the PHQ-9 test if a PHQ-2 test is positive (VA, 2007).

Substance Use Disorder

For patients who screen positive for unhealthy alcohol use, the VA/DoD guideline recommends assessing current alcohol consumption relative to the limits established by the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2008).⁵ If the limits are exceeded, brief alcohol counseling by a clinician or counselor (often termed brief intervention) is recommended. Brief interventions can be a single session or multiple sessions involving motivational interviewing techniques focused on drinking-related consequences and the benefits of reducing alcohol use.

The VA/DoD guideline recommends referral to specialty SUD care for addiction treatment for a patient who has an Alcohol Use Disorders Identification Test Consumption score of 8 or higher (on a scale of 0–12) or who meets one of the following criteria: needs additional evaluation, does not respond to a brief intervention, has a *DSM* diagnosis of alcohol or other substance dependence, or has received previous treatment for SUDs.

Suicidal Ideation and Behavior

According to the 2013 *VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide* (VA and DoD, 2013), “any person who is identified as being at possible suicide risk should be formally assessed for suicidal ideation, plans, intent and behavior, the availability of lethal means, and the presence of risk factors and warning signs” (p. 8). In addition, the level of suicide risk (high acute risk, intermediate acute risk, and low acute risk) should be determined, and a formulation of the care setting should be decided upon.

As reported in the VA/DoD guideline, there is insufficient evidence to recommend any specific measurement scale to determine suicide risk. Several instruments have demonstrated the capability of detecting important risk factors for suicide; however, the evidence for the effectiveness of available suicide assessment instruments to predict suicide attempts and suicide is very limited and inconclusive (Fowler, 2012; Haney et al., 2012). Instruments like the PHQ-9, which assesses depression severity and

⁵NIAAA recommends maximum alcohol limits of no more than 14 drinks in a week and no more than 4 drinks in a day for men and no more than 7 drinks in a week and no more than 3 drinks in a day for women. Drinking above the recommended limits is called risky or hazardous drinking.

includes a question regarding the presence of suicidal ideation, are widely accepted and administered to patients in VA primary care settings.

Suicide Prevention

In addition to issuing VA/DoD clinical guidance about suicide risk screening and assessment, VA has implemented a number of other strategies to support veterans at risk of suicide (Bagalman, 2016). VA policy requires every VAMC to have at least one suicide prevention coordinator with a full-time commitment to suicide prevention activities, including tracking and reporting on veterans at high risk for suicide and coordinating clinical care for high-risk veterans.

According to VA policy, it is the responsibility of suicide prevention coordinators to submit suicide behavior reports for all known suicide events (deaths, attempts, and serious suicidal ideation). They submit these reports to a centralized database, the VA Suicide Prevention Applications Network (SPAN). An entry of a suicide event into SPAN results in the placement of the veteran on the VA high-risk list, the use of treatment flags in the electronic medical record system, and enhancements to care and case management. Hoffmire et al. (2016) assessed VA data on suicide attempts and found that the use of SPAN substantially increased the collection of data on suicide attempters as compared with the use of medical records alone, but neither SPAN nor the VA's medical records identify all suicide attempters. The author concluded that additional research is needed to better understand how to optimize VA information systems for comprehensive surveillance of suicide attempts among VA service users (Hoffmire et al., 2016).

Another VA suicide prevention activity is the implementation of a safety planning protocol for use with high-risk patients. A safety plan is a written document developed jointly by a patient and a clinician that identifies strategies for coping in a crisis (Stanley and Brown, 2008). As used in the VA, the safety plan involves the following elements in episodes of suicidal ideation: recognizing signs of increasing risk; using specific coping strategies; getting support from social contacts; seeking assistance from family members, friends, or professionals; and reducing access to lethal means such as firearms (Claassen and Knox, 2011). VA protocol requires that the plan be included in the patient's medical record and that a copy be given to the patient.

To reach veterans in the community, in 2007 the VA established the Veterans Crisis Line (VCL) which veterans can access by calling a national toll-free number, connecting to online chat, or sending a text message. A 2016 Government Accountability Office (GAO) report reviewed VA's administration of the VCL found that the "VA cannot ensure that the VCL is providing consistent, high-quality services to callers and cannot effectively track and publicly report progress or results" (GAO, 2016, p. 2). In April 2017, VA Secretary David Shulkin announced that less than 1 percent of calls were now being rerouted to back-up centers (VA, 2017c). While lawmakers commended this improvement, they also cautioned that other improvements were still needed, such as filling the director position of the VCL (Ogrysko, 2017). Similarly, the Government Accountability Office and the VA Office of Inspector General have both recently identified continued problems related to wait times, leadership, and performance monitoring (GAO, 2017; VA Office of Inspector General, 2017). VA has raised awareness about the Veterans Crisis Line and suicide prevention through awareness campaigns such as Power of One and Be There.

In the VA's ongoing effort to prevent veteran suicides, VA Secretary Shulkin announced in 2017 that the VA would offer emergency mental health care to veterans with an other-than-honorable (OTH) discharge status (VA, 2017d). As described in Chapter 6, veterans with an OTH discharge are routinely denied health care services unless they request an eligibility adjudication from the VBA, asking that their discharge be ruled not dishonorable. Very few requests for eligibility adjudication are granted (Swords to Plowshares, 2016). Under the new initiative, veterans with OTH discharges will be eligible

to seek treatment at a VA emergency department or Vet Center or to contact the Veterans Crisis Line. For individuals requiring emergency mental health care, a full array of mental health services, including inpatient mental health care and follow-up outpatient, residential, and substance use disorder services, may be provided for up to 90 days. If longer-term services are needed, the VA will coordinate a transition to community-based care, but it does not have the legal authority to provide ongoing care to veterans with OTH discharges at the VA's expense (VA, 2017b).

Within the VHA, research on suicide prevention is supported by three research components: the Office of Research and Development, a center of excellence in suicide prevention, and a mental illness research, education, and clinical center on suicide prevention. The research components conduct veteran-specific research to identify characteristics associated with higher rates of suicide (that is, risk factors) and lower rates of suicide (that is, protective factors) as well as research evaluating the effectiveness of suicide prevention interventions (Bagalman, 2016).

International experts who reviewed the literature on suicide-prevention interventions have concluded that restriction of access to lethal means is one of the few suicide-prevention policies that has proven effectiveness. A systematic review on suicide prevention by Mann et al. (2005) concluded that among the methods used to reduce suicide (physician education, restricting lethal means, public education, screening programs, and mass-media education), restricting access to lethal methods and the education of physicians in depression recognition and treatment were found to prevent suicide.

The VA promotes safe use of firearms as part of its comprehensive suicide prevention strategy. The VA has distributed over 3 million gunlocks nationwide since 2010 and disseminates a safety video and brochure (VA, 2017b).⁶ See Chapter 6 for a discussion of veteran treatment-seeking behavior as it relates to firearms.

Treatment Interventions at the Department of Veterans Affairs

As described above, VA policy indicates that if a clinical assessment confirms a mental health diagnosis, a veteran is to be offered treatment. The following is summary of treatment interventions that are recommended in the VA/DoD joint guidelines for each condition. Refer to Chapter 11 for a detailed discussion about whether veterans who have mental health care needs and use VA services are receiving the treatments described here. Below, details about relevant VA policy or findings from recent studies supplement the discussion about recommended treatments; however, a systematic review of randomized controlled trials addressing the efficacy of various treatments is beyond the scope of the committee's charge and is not included in the discussion of the literature.

Posttraumatic Stress Disorder

Determining the appropriate treatment for PTSD can be complicated because PTSD presents with varied psychosocial morbidity and functional impairment and is often comorbid with other psychiatric disorders, particularly SUD, major depression, and mild TBI. In general, the treatment for PTSD symptoms includes three broad intervention categories: psychotherapy (based on psychology techniques), pharmacotherapy (using prescription medication), and education (including the teaching of coping mechanisms for the patient and family members).

The first-line psychotherapy treatment recommended by the VA/DoD guideline for PTSD (VA and DoD, 2013) is trauma-focused psychotherapy that includes components of exposure or cognitive

⁶See www.veteranscrisisline.net.

restructuring or stress inoculation training (SIT). Specifically, the approach may include an exposure-based therapy, such as prolonged exposure (PE); a cognitive-based therapy, such as cognitive processing therapy (CPT); stress management therapy (such as SIT); or eye-movement desensitization and reprocessing. In addition, the guideline identifies other approaches as having possible benefits in treating for PTSD, including relaxation techniques, imagery-reversal therapy, brief psychodynamic therapy, hypnosis, and group therapy. However, the VA/DoD guideline for PTSD indicates there is insufficient evidence to recommend for or against dialectical behavioral therapy (a type of cognitive-behavioral psychotherapy) or family and couples therapy as first-line treatments for PTSD. Of the various psychotherapies, VA policy requires that CPT and PE must be available to all veterans with PTSD who need and want it (VA, 2015c).

As discussed in more detail in Chapter 14, the use of technology for the delivery of psychotherapy treatment for PTSD is increasing. The VA/DoD PTSD guideline supports the use of telephone delivery and videoconferencing—clinical videoconferencing technology (CVT)—particularly to overcome geographic distance or other barriers to care. Randomized clinical trials published since the 2010 VA/DoD PTSD guideline have demonstrated that PTSD outcomes with CVT delivery of trauma-focused therapies are generally comparable to outcomes associated with traditional service delivery methods (Morland and Ruzek, 2015). On the other hand, the VA/DoD guideline does not recommend Internet-based interventions for treatment for PTSD. More research is needed to establish the efficacy of both online tools and mobile applications (apps) that provide either educational information, screening and self-assessment, treatment, or social support. However, researchers indicate it is reasonable to use such tools—for example, VA’s app called PTSD Coach—to augment psychotherapy or case management and to provide initial psychoeducation as these tools pose no risk and have advantages over paper and pencil tools (Morland and Ruzek, 2015).

Among the pharmacotherapy interventions, the first-line agents recommended by the VA/DoD guideline are mainly two closely related classes of antidepressants, selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs). When necessary, the guideline suggests that the use of second-line agents, such as mirtazapine, nefazodone, tricyclic antidepressants (TCAs), and monoamine oxidase inhibitors (MAOIs), be considered. In addition, the guideline recommends the atypical antipsychotics risperidone or olanzapine as adjunctive treatment with antidepressants.

The VA/DoD guideline cautions against treating the primary symptoms of PTSD using benzodiazepines, a type of anti-anxiety medication, due to the lack of efficacy data and the potential risk of tolerance and dependence. Yet VA data show that these medications are prescribed often, presumably to manage secondary symptoms of PTSD such as insomnia and anxiety, suggesting a gap between guideline recommendations and actual clinical care (Bernardy, 2013). Evidence of efficacy is growing for prazosin, an alpha-1 adrenergic antagonist, in the treatment of nightmares and sleep disturbance among veterans with PTSD (De Berardis et al., 2015; George et al., 2016).

Major Depressive Disorder

For initial treatment for mild or moderate MDD, the VA/DoD guideline advocates the use of monotherapy—either psychotherapy or pharmacotherapy with a single antidepressant (Management of Major Depressive Disorder Working Group, 2016). A combination treatment with pharmacotherapy and psychotherapy should be used for moderate to severe MDD or for patients who have a poor response to monotherapy. The guideline advises that patients who receive a diagnosis of mild or moderate MDD may be treated with the use of the collaborative care model in primary care (see Chapter 12 for more

information about VA collaborative care). Patients who have severe MDD or any complicated MDD and comorbidities should be referred to specialty care for treatment.

The VA/DoD guideline indicates that the evidence does not support recommending a specific evidence-based psychotherapy or pharmacotherapy over another. The recommended first-line medications include SSRIs (excluding fluvoxamine), SNRIs, bupropion, and mirtazapine. Most people need to be on medication for at least 6 to 12 months after adequate response to prevent relapses.

The recommended first-line psychotherapies include cognitive behavioral therapy (CBT), behavioral therapy/behavioral activation, interpersonal therapy (IPT), mindfulness-based cognitive therapy, and problem-solving therapy and acceptance and commitment therapy (ACT). Of these treatments, a VA policy directive states that all veterans who have depression (or anxiety disorders) must have access to ACT, as well as CBT and IPT (VA, 2015c). In addition, the VA's initiative to disseminate evidence-based psychotherapies includes ACT on a priority list, and the VA has already provided training in ACT to hundreds of its clinicians. It is worth noting that while VA policy and the joint VA and DoD MDD guideline promote ACT as a first-line treatment for depression, there is a debate in the scientific community about the strength of the evidence (Zettle, 2015). While the Society of Clinical Psychology (2016) considers the current empirical support of ACT in the treatment of depression to be modest, some recent reviews have concluded that additional research with more rigorous methodological designs is needed before definitive claims can be made about the efficacy of ACT for depression (Montgomery et al., 2011; Ost, 2014). The results of a recent randomized clinical trial of ACT for the treatment of distress in OEF/OIF/OND veterans suggest that ACT may not be a first-line therapy for veterans with anxiety and depression (Lang et al., 2016). The study involved 160 veterans from five VAMCs with a diagnosis of anxiety or depressive disorder who were randomized to ACT or to present-centered therapy (PCT) (another manualized psychotherapy). Participants were assessed before, during, and after treatment and during a 3- to 12-month follow-up. The trial found that, overall, veterans did not respond differently to ACT than they did to PCT. Although ACT led to greater improvement in insomnia than did PCT (standard deviation = 0.63 and 0.08, respectively), the response to the two interventions did not differ on the primary outcome or on most secondary outcomes.

The VA/DoD MDD guideline recommends that the first-line psychotherapies be offered in an individual or group format based on patient preference. The guideline also cites computer-based CBT as an alternative to traditional individual or group psychotherapy. The guideline authors noted that next revision of the guideline should formally review the literature on the broader array of telehealth approaches and incorporate this information into the guideline, as supported by the evidence.

For patients who have severe MDD, additional treatments that should be considered include electroconvulsive therapy, and the two classes of medications, MAOIs and TCAs.

Among the possible complementary and integrative health modalities for depression, the VA/DoD guideline recommends the use of exercise as an adjunct to other empirically supported treatments. For patients who have mild MDD, light therapy can be considered to treat seasonal affective disorder, and St. John's wort may be used by those who prefer herbal treatments. The guideline indicates there is insufficient evidence to recommend for or against acupuncture, yoga, tai chi, or qi gong as treatments for MDD. The VA offers a variety of complementary and integrative health interventions that have almost no evidence base in the treatment of depression, but which have been used for relaxation in other settings.

Substance Use Disorder

The goals of SUD treatment include abstinence or reduction in substance use, relapse prevention, and improvement in psychologic and social functioning. The specific type of intervention or treatment

chosen will depend on the type of substances used, the intensity of use, and the patient's individual needs. SUDs commonly occur with other mental health conditions (such as PTSD and depression) and with chronic medical illnesses (such as diabetes) that also require treatment. For many, a SUD is a chronic disorder that requires multiple interventions and continuing monitoring.

Detoxification and withdrawal management is often a necessary first step toward treatment of those who have SUDs. Pharmacologically supervised withdrawal is warranted only for alcohol, sedative hypnotics, and opioids; it is not warranted for stimulant and cannabis disorders.

For inpatient treatment for alcohol withdrawal, the VA/DoD guideline (VA and DoD, 2009) recommends the use of benzodiazepines as first-line treatment, with other agents (such as beta-blockers and clonidine) as adjuncts in some patients. For opioid withdrawal, the guideline recommends initial stabilization and then short or extended tapering with buprenorphine and naloxone or methadone in 4 to 7 days in an inpatient setting. Withdrawal management should be followed by appropriate pharmacologic maintenance or behavioral therapies.

For patients with alcohol use disorders, the first-line pharmacotherapies recommended by the VA/DoD guideline are oral naltrexone and acamprosate; both are Food and Drug Administration (FDA)-approved for this indication. The guideline discusses psychosocial interventions that research has shown to be effective: behavioral couples counseling, cognitive behavioral coping skills training, community reinforcement, motivational enhancement, and 12-step facilitation.

For patients who are dependent on opioids, the VA/DoD guideline recommends as first-line treatment methadone or the sublingual combination product of buprenorphine and naloxone. Those medications are used in opioid-agonist treatment (OAT), which consists of administering one of the opioid-agonist medications in combination with a variety of medical, counseling, and rehabilitative services. OAT can be delivered through a VA-licensed OAT clinic or through office-based treatment; however, buprenorphine is the only medication approved for office-based OAT. As adjunct interventions with pharmacotherapy, the guideline identifies CBT and contingency management as effective psychosocial therapies for opioid dependence.

The VA/DoD guidance regarding the management of cocaine and marijuana use is limited to recommendations for psychosocial interventions. CBT, behavioral couples therapy, and contingency management are identified as the interventions that are supported by the most evidence of effectiveness in treating cocaine dependence. For cannabis, the guideline indicates that there is some evidence that CBT is effective.

Suicidal Ideation and Behavior

This section describes the recommendations for treating patients at risk for suicide as identified by the 2013 *VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide* (VA/DoD, 2013). The guideline first recommends developing a treatment plan with the patient in mind and notes that patients with suicidal thoughts most often benefit from a combination of different treatments. The main treatments discussed in the VA/DoD guideline are psychotherapy, pharmacotherapy, and electroconvulsive therapy. Research shows that 90 percent of people who committed suicide had psychiatric and mood disorders and that more than 80 percent had not received treatment at the time of death (Mann et al., 2005). Thus, a primary component of suicide prevention is prompt evidence-based treatment for the relevant psychiatric illness.

Psychotherapy is first discussed in the VA/DoD guideline in the context of suicide-focused psychotherapy, then in the context of psychotherapy for co-occurring mental disorders associated with suicide risk. Evidence-based cognitive therapies are found to be used in both settings. In patients who have a history of suicide attempts, CBT is recommended for reducing the risk of further

suicide attempts. The guideline notes that one randomized controlled trial found that 10 sessions of CBT led to 50 percent fewer suicide attempts than enhanced usual care (tracking and referral) without reducing rates of suicidal ideation (Brown et al., 2005). Similarly, Rudd et al. (2015) found that “brief CBT was effective in preventing follow-up suicide attempts among active-duty military service members with current suicidal ideation and/or a recent suicide attempt” (p. 441). A specific type of cognitive therapy called problem-solving therapy (PST) has proven to be a suitable suicide-focused psychotherapy for at-risk patients. Hawton et al. (2016) conducted two systematic reviews based on multiple studies and found that PST contributed to decreases in deliberate self-harm in suicidal patients.

Psychotherapies for co-occurring mental disorders associated with suicide risk are discussed in relation to borderline personality disorder, schizophrenia, and SUD. The VA/DoD guideline notes that in cases of treating co-occurring mental disorders the treatment plan should be modified to specifically address the risk of suicide. Dialectical behavior therapy (DBT) is said to be “the most thoroughly studied treatment of existing psychotherapies for suicidal behavior” (VA and DoD, 2013, p. 97). A number of studies support the use of DBT for decreasing the reoccurrence of suicide-like behaviors (e.g., Mann et al., 2005; Tarrier et al., 2008).

While the evidence for the use of pharmacotherapy to explicitly address suicide risk is limited and drug treatment as a specific intervention for preventing suicide is not recommended, there are pharmacological treatments that can be included in a treatment plan to address suicide risk for patients with established mental illnesses. The guideline cites evidence for the benefits of lithium in reducing suicide risk and suicide attempt relapses in patients with major depressive disorder and bipolar disorder. In a review of 372 randomized, double-blind, placebo-controlled trials, the FDA found that although there is no indication that prescribing antidepressants to patients with mood disorders helps to lessen the risk of suicide, antidepressants were not shown to increase the risk of suicidal ideation or behavior in patients over age 25 either (Stone et al., 2009).

The final treatment discussed in the VA/DoD guideline is electroconvulsive therapy (ECT). ECT should be considered in cases where other treatments have not proven effective or when an immediate resolution of suicidal symptoms is needed. This therapy can be used on patients with certain types of MDD, manic episodes, bipolar disorder, depression, PTSD, and acute schizophrenia. The VA/DoD guideline for PTSD (2010) suggests considering ECT for severe, medication- and psychotherapy-resistant PTSD.

Comorbid Conditions

As discussed at the beginning of the chapter, military service members and veterans are often diagnosed with more than one mental health condition. Conditions that frequently occur simultaneously are commonly referred to as “comorbid” and “co-occurring” conditions. Comorbid mental health conditions are important to recognize because they can modify the clinical determinations of prognosis, patient or provider treatment priorities, the selection of interventions, and the setting where care will be provided (Lew et al., 2008). Current evidence-based practices to identify and treat people for conditions may be less accurate or effective when conditions co-occur (Carlson et al., 2009).

As described in previous chapter sections, substantial evidence-based clinical guidance exists for the management of individual mental health conditions that are prevalent among veterans. However, much less is known about the best clinical practices for patients with multiple mental health diagnoses that occur simultaneously.

The literature is insufficient to determine whether the diagnostic or even screening instruments commonly used for assessing the symptoms of a particular condition perform accurately when a person has more than one condition. Nor does the literature support the use of any one instrument over others (Carlson et al., 2011; Guillamondegui et al., 2011). In addition, there is a gap in knowledge about whether evidence-based treatments for a single condition are effective when conditions co-occur or whether unique therapies are necessary for people who have multiple conditions. There are no empirically validated therapies for comorbid PTSD, MDD, SUD, and postconcussive disorders (Lew et al., 2008).

Co-Occurring Substance Use Disorder

There is a growing body of empirical data on interventions for patients diagnosed with PTSD or MDD and co-occurring SUD. For example, studies have shown positive results for Seeking Safety, a treatment model for co-occurring SUD and PTSD (Boden et al., 2012; Desai et al., 2008). To test how Seeking Safety fares when incorporated into the VA SUD programs, Boden et al. (2012) conducted a randomized controlled effectiveness trial with 117 veterans who had diagnoses of SUD and co-occurring PTSD symptoms. They concluded that their findings provided support for the feasibility and benefit of addressing PTSD and SUD simultaneously and early in SUD treatment as opposed to requiring separate or sequential treatments or a period of abstinence before PTSD-focused care. A review of the evidence by the National Center for PTSD was more tempered: the authors noted that the results of randomized controlled trials, although promising, were equivocal, and they thus concluded that Seeking Safety should probably be combined with other treatments to ensure that all problematic behaviors decrease (Gulliver and Steffen, 2010).

Studies have also examined pharmacological treatment approaches for patients diagnosed with MDD and co-occurring SUD. For example, the findings of one controlled trial (Pettinati et al., 2010) show positive results from treating alcohol-dependent patients diagnosed with MDD with sertraline (an antidepressant) combined with naltrexone (to treat alcohol dependence). On the other hand, evidence of the efficacy and safety of antidepressants for treating MDD in people who are dependent on opioids (such as morphine and heroin, codeine, oxycodone, and hydrocodone) is inconclusive, according to one systematic review of the literature on this topic (Pani Pier et al., 2010).

There are a few clinical trials that have examined the efficacy of psychotherapy for co-occurring MDD and SUD. Hides et al. (2010) reviewed the research and concluded that there is minimal evidence for CBT being effective either alone or in combination with antidepressant medication for treating co-occurring MDD and SUD.

Individually the VA/DoD clinical guidelines for MDD, PTSD, and SUD acknowledge that few published trials can provide clinicians with guidance in treating conditions that are complicated by comorbid illness. Given the lack of evidence on efficacious treatments for comorbid conditions, the best practices involve treating for symptoms regardless of etiology. Experts agree that clinical judgment informed by available clinical guidance, systematic symptom monitoring, and the clinician–patient relationship is needed in deciding which specific treatments to implement, for which patients, and under which treatment conditions (Brenner et al., 2009; National Center for PTSD, 2010a,b; Otis et al., 2011).

In 2009 the VA Office of Mental Health and Suicide Prevention and the VA Office of Rehabilitation Services sponsored two consensus panels to make practice recommendations related to the diagnosis and management of common comorbid conditions in veterans. One panel addressed comorbid PTSD, pain, and mild TBI (National Center for PTSD, 2010b), and another panel addressed comorbid SUD and PTSD (National Center for PTSD, 2010a). Both panels concluded that the existing guidance in the individual VA/DoD CPGs was appropriate for treating patients who simultaneously meet the diagnostic criteria for

these disorders. In addition, the consensus panel addressing comorbid SUD and PTSD (National Center for PTSD, 2010a) urged VA SUD and PTSD specialists to use effective first-stage treatment strategies, such as the use of motivational interviewing principles and Seeking Safety, a treatment for co-occurring SUD and PTSD (discussed above), which is recommended in the *VHA Handbook for Uniform Mental Health Services in VA Medical Centers and Clinics* (VA, 2015c).

Assessment of Clinical Practices for Screening, Assessment, and Treatment in the Department of Veterans Affairs

In 2013 the IOM released *Returning Home from Iraq and Afghanistan, Assessment of the Readjustment Needs of Veterans, Service Members and Their Families* (IOM, 2013a). As part of its charge, the authoring committee (“IOM Readjustment Committee”) examined the efficacy of the health screening and assessment practices and treatment interventions that DoD and the VA use in the management of mental health conditions. The IOM Readjustment Committee reviewed approaches recommended by VA/DoD CPGs for PTSD, MDD, and SUDs and compared them with clinical guidelines developed by leading scientific and professional organizations from the United States, the United Kingdom, and Australia.⁷ That committee also reviewed the research and policy literature as a basis for discussing standard-of-care recommendations that were presented in its report. Among the major studies informing the IOM Readjustment Committee was an evaluation of VA mental health programs by the RAND–Altarum research team (Watkins and Pincus, 2011). Their analysis revealed, among other factors, low documented use of evidenced-based practices and variation in many of the performance indicators assessed with regard to specific populations, services, and locations.

The review by the IOM Readjustment Committee suggested that the screening, diagnostic assessment, and treatments for PTSD, MDD, SUD, and suicide risk at the VA are consistent with current standards and guidelines for care. In its report the Readjustment Committee stated: “Overall, the VA/DoD clinical guidelines for screening, assessment, and treatment are in line with the available evidence base and the state-of-the-art CPGs put forth by various professional organizations” (IOM, 2013a, p. 236). In addition, that committee found that the screening and assessment instruments that VA clinicians use have adequate psychometric properties and are among those advocated by experts in the field.

Although VA clinical guidance for mental health reflects the state of the current evidence, the Readjustment Committee emphasized that the presence of clinical guidelines does not ensure that veterans will receive optimal evidence-based care. The committee identified shortcomings in the implementation of the guidelines and also inconsistent use of the recommended guidance by VA providers. The committee found that “[t]he available data suggest that patients who need evidence-based care may not be receiving it” (IOM, 2013a, p. 237). Since the evaluations by the IOM Readjustment Committee and RAND–Altarum research team, this committee has found that gaps remain in the VA’s implementation of evidence-based care. Many veterans who need mental health care may not be receiving adequate treatment. Chapter 11 examines more fully the extent to which the VA is implementing evidence-based mental health care to veterans in the health system.

⁷The Readjustment Committee did not review the VA/DoD guideline for the management of suicide risk as that CPG was released after the committee’s report had been published.

SUMMARY

This chapter summarizes details about the population at risk for mental health problems and describes the VA health system's clinical management of the leading mental health conditions in OEF/OIF/OND veterans.

- VA processes for developing and updating clinical practice guidelines are defined and consistent with guideline development standards.
- The clinical practices the VA uses for screening, diagnostic assessment, and treatments for PTSD, MDD, SUD, and suicide risk are mostly consistent with current standards and guidelines for care.
 - One notable exception is the priority the VA places on using ACT in the treatment of depression.
 - The strength of the evidence for ACT is equivocal and calls into question the VA's recommendation for the use of ACT as first-line treatment for depression.
- Gaps exist in the level of understanding about the extent of GAD in the veteran population seeking care at the VA. The VA currently does not have clinical guidelines for managing GAD, nor are veterans routinely and systematically screened for GAD.
- There is no formal connection between VBA evaluations for service-connected PTSD claims and VA assessments of the need for treatment.
- The disconnect between VBA compensation exams and the VA mental health system may lead to missed opportunities to provide treatment to veterans.

REFERENCES

- APA (American Psychiatric Association). 2000. *Diagnostic and statistical manual of mental disorders, 4th ed. (DSM-IV-TR)*. Washington, DC: American Psychiatric Association.
- APA. 2013. *Diagnostic and statistical manual of mental disorders, fifth ed. (DSM-V)*. Washington, DC: American Psychiatric Association.
- Bagalman, E. 2016. *Health care for veterans: Suicide prevention*. Washington, DC: Congressional Research Service.
- Barrera, T. L., D. P. Graham, N. J. Dunn, and E. J. Teng. 2013. Influence of trauma history on panic and posttraumatic stress disorder in returning veterans. *Psychological Services* 10(2):168–176.
- Barrera, T. L., J. M. Mott, N. E. Hundt, J. Mignogna, H. J. Yu, M. A. Stanley, and J. A. Cully. 2014. Diagnostic specificity and mental health service utilization among veterans with newly diagnosed anxiety disorders. *General Hospital Psychiatry* 36(2):192–198.
- Bernardy, N. C. 2013. The role of benzodiazepines in the treatment of posttraumatic stress disorder (PTSD). *PTSD Research Quarterly* 23(4)1–3.
- Boden, M. T., R. Kimerling, J. Jacobs-Lentz, D. Bowman, C. Weaver, D. Carney, R. Walser, and J. A. Trafton. 2012. Seeking safety treatment for male veterans with a substance use disorder and post-traumatic stress disorder symptomatology. *Addiction* 107(3):578–586.
- Bonelli, R. M., and H. G. Koenig. 2013. Mental disorders, religion and spirituality, 1990 to 2010: A systematic evidence-based review. *Journal of Religion and Health* 52(2):657–673.
- Booth-Kewley, S., G. E. Larson, R. M. Highfill-McRoy, C. F. Garland, and T. A. Gaskin. 2010. Correlates of posttraumatic stress disorder symptoms in marines back from war. *Journal of Traumatic Stress* 23(1):69–77.
- Booth-Kewley, S., E. A. Schmied, R. M. Highfill-McRoy, G. E. Larson, C. F. Garland, and L. A. Ziajko. 2013. Predictors of psychiatric disorders in combat veterans. *BMC Psychiatry* 13:130.
- Brailey, K., J. J. Vasterling, S. P. Proctor, J. I. Constans, and M. J. Friedman. 2007. PTSD symptoms, life events, and unit cohesion in US soldiers: Baseline findings from the neurocognition deployment health study. *Journal of Traumatic Stress* 20(4):495–503.
- Brenner, L. A., R. D. Vanderploeg, and H. Terrio. 2009. Assessment and diagnosis of mild traumatic brain injury, posttraumatic stress disorder, and other polytrauma conditions: Burden of adversity hypothesis. *Rehabilitation Psychology* 54(3):239–246.

- Brenner, L. A., R. E. Breshears, L. M. Betthausen, K. K. Bellon, E. Holman, J. E. Harwood, M. M. Silverman, J. Huggins, and H. T. Nagamoto. 2011a. Implementation of a suicide nomenclature within two VA healthcare settings. *Journal of Clinical Psychology in Medical Settings* 18(2):116–128.
- Brenner, L. A., R. V. Ignacio, and F. C. Blow. 2011b. Suicide and traumatic brain injury among individuals seeking Veterans Health Administration services. *Journal of Head Trauma Rehabilitation* 26(4):257–264.
- Britton, P. C., M. A. Ilgen, M. Valenstein, K. Knox, C. A. Claassen, and K. R. Conner. 2012. Differences between veteran suicides with and without psychiatric symptoms. *American Journal of Public Health* 102(Suppl 1):S125–S130.
- Brown, G. K., T. Ten Have, G. R. Henriques, S. X. Xie, J. E. Hollander, and A. T. Beck. 2005. Cognitive therapy for the prevention of suicide attempts: A randomized controlled trial. *JAMA* 294(5):563–570.
- Bruce, M. L. 2010. Suicide risk and prevention in veteran populations. In *Psychiatric and neurologic aspects of war*. Vol. 1208, *Annals of the New York Academy of Sciences*, edited by J. D. Barchas and J. Difede. Pp. 98–103.
- Bryan, C. J., and T. A. Clemans. 2013. Repetitive traumatic brain injury, psychological symptoms, and suicide risk in a clinical sample of deployed military personnel. *JAMA Psychiatry* 70(7):686–691.
- Bryan, C. J., and A. M. Hernandez. 2013. The functions of social support as protective factors for suicidal ideation in a sample of air force personnel. *Suicide and Life-Threatening Behavior* 43(5):562–573.
- Bryan, C. J., E. Graham, and E. Roberge. 2015. Living a life worth living: Spirituality and suicide risk in military personnel. *Spirituality in Clinical Practice* 2(1):74–78.
- Bush, K., D. R. Kivlahan, M. B. McDonell, S. D. Fihn, and K. A. Bradley. 1998. The audit alcohol consumption questions (AUDIT-C): An effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol use disorders identification test. *Archives of Internal Medicine* 158(16):1789–1795.
- Cabrera, O. A., C. W. Hoge, P. D. Bliese, C. A. Castro, and S. C. Messer. 2007. Childhood adversity and combat as predictors of depression and post-traumatic stress in deployed troops. *American Journal of Preventive Medicine* 33(2):77–82.
- Carlson, K., N. Greer, S. Kehle, R. MacDonald, L. Meis, I. Rutks, and T. J. Wilt. 2009. *The assessment and treatment of individuals with history of traumatic brain injury and post-traumatic stress disorder: A systematic review of the evidence*. Minneapolis, MN: Evidence-based Synthesis Program Center.
- Carlson, K. F., D. Nelson, R. J. Orazem, S. Nugent, D. X. Cifu, and N. A. Sayer. 2010. Psychiatric diagnoses among Iraq and Afghanistan war veterans screened for deployment-related traumatic brain injury. *Journal of Traumatic Stress* 23(1):17–24.
- Carlson, K. F., S. M. Kehle, L. A. Meis, N. Greer, R. Macdonald, I. Rutks, N. A. Sayer, S. K. Dobscha, and T. J. Wilt. 2011. Prevalence, assessment, and treatment of mild traumatic brain injury and posttraumatic stress disorder: A systematic review of the evidence. *Journal of Head Trauma Rehabilitation* 26(2):103–115.
- Claassen, C. A., and K. L. Knox. 2011. Chapter 5: Assessment and management of high-risk suicidal states in postdeployment Operation Enduring Freedom and Operation Iraqi Freedom military personnel. In *Caring for veterans with deployment-related stress disorders: Iraq, afghanistan and beyond*, edited by J. I. Ruzek, P. P. Schnurr, J. J. Vasterling, and M. J. Friedman. Washington, DC: American Psychological Association. Pp. 109–127.
- Crosby, A. E., L. Ortega, and C. Melanson. 2011. *Self-directed violence surveillance: Uniform definitions and recommended data elements*. Atlanta, GA: Centers for Disease Control and Prevention.
- CRS (Congressional Research Service). 2015. *The mental health workforce: A primer*. Washington, DC: Congressional Research Service.
- De Berardis, D., S. Marini, N. Serroni, F. Iasevoli, C. Tomasetti, A. de Bartolomeis, M. Mazza, D. Tempesta, A. Valchera, M. Fornaro, M. Pompili, G. Sepede, F. Vellante, L. Orsolini, G. Martinotti, and M. Di Giannantonio. 2015. Targeting the noradrenergic system in posttraumatic stress disorder: A systematic review and meta-analysis of prazosin trials. *Current Drug Targets* 16(10):1094–1106.
- Dedert, E. A., K. T. Green, P. S. Calhoun, R. Yoash-Gantz, K. H. Taber, M. M. Mumford, L. A. Tupler, R. A. Morey, C. E. Marx, and R. D. Weiner. 2009. Association of trauma exposure with psychiatric morbidity in military veterans who have served since September 11, 2001. *Journal of Psychiatric Research* 43(9):830–836.
- Desai, R. A., I. Harpaz-Rotem, L. M. Najavits, and R. A. Rosenheck. 2008. Impact of the Seeking Safety program on clinical outcomes among homeless female veterans with psychiatric disorders. *Psychiatric Services* 59(9):996–1003.
- DoD (U.S. Department of Defense). 2013. *Department of Defense annual report on sexual assault in the military. Fiscal year 2012. Volume 2*. Washington, DC: Department of Defense Sexual Assault Prevention and Response Office.
- Doran, N., S. De Peralta, C. Depp, B. Dishman, L. Gold, R. Marshall, D. Miller, S. Vitale, and M. Tiamson-Kassab. 2016. The validity of a brief risk assessment tool for predicting suicidal behavior in veterans utilizing VHA mental health care. *Suicide and Life-Threatening Behavior* 46(4):471–485.
- Dundon, M., K. Dollar, M. Schohn, and L. J. Lantinga. 2011. *Primary care-mental health integration co-located, collaborative care: An operations manual*. Buffalo, NY: Center for Integrated Healthcare.

- Dutra, L., K. Grubbs, C. Greene, L. L. Trego, T. L. McCartin, K. Kloezeman, and L. Morland. 2011. Women at war: Implications for mental health. *Journal of Trauma & Dissociation* 12(1):25–37.
- Fowler, J. C. 2012. Suicide risk assessment in clinical practice: Pragmatic guidelines for imperfect assessments. *Psychotherapy (Chicago)* 49(1):81–90.
- Friedman, M. J. 2013. Finalizing PTSD in *DSM-5*: Getting here from there and where to go next. *Journal of Traumatic Stress* 26(5):548–556.
- Fritch, A. M., M. Mishkind, M. A. Reger, and G. A. Gahm. 2010. The impact of childhood abuse and combat-related trauma on postdeployment adjustment. *Journal of Traumatic Stress* 23(2):248–254.
- Fulton, J. J., P. S. Calhoun, H. R. Wagner, A. R. Schry, L. P. Hair, N. Feeling, E. Elbogen, and J. C. Beckham. 2015. The prevalence of posttraumatic stress disorder in Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veterans: A meta-analysis. *Journal of Anxiety Disorders* 31:98–107.
- Gadernann, A. M., C. C. Engel, J. A. Naifeh, M. K. Nock, M. Petukhova, P. N. Santiago, B. Wu, A. M. Zaslavsky, and R. C. Kessler. 2012. Prevalence of *DSM-IV* major depression among U.S. military personnel: Meta-analysis and simulation. *Military Medicine* 177(8S):47–59.
- Gahm, G. A., B. A. Lucenko, P. Retzlaff, and S. Fukuda. 2007. Relative impact of adverse events and screened symptoms of posttraumatic stress disorder and depression among active duty soldiers seeking mental health care. *Journal of Clinical Psychology* 63(3):199–211.
- GAO (Government Accountability Office). 2016. *Veteran crisis line: Additional testing, monitoring, and information needed to ensure better quality service*. Washington, DC: Government Accountability Office.
- GAO. 2017. *Veterans crisis line: Further efforts needed to improve service*. Washington, DC: Government Accountability Office.
- George, K. C., L. Kebejian, L. J. Ruth, C. W. T. Miller, and S. Himelhoch. 2016. Meta-analysis of the efficacy and safety of prazosin versus placebo for the treatment of nightmares and sleep disturbances in adults with posttraumatic stress disorder. *Journal of Trauma & Dissociation* 17(4):494–510.
- Green, K. T., J. C. Beckham, N. Youssef, and E. B. Elbogen. 2014. Alcohol misuse and psychological resilience among U.S. Iraq and Afghanistan era veterans. *Addictive Behaviors* 39(2):406–413.
- Grieger, T. A., S. J. Cozza, R. J. Ursano, C. Hoge, P. E. Martinez, C. C. Engel, and H. J. Wain. 2006. Posttraumatic stress disorder and depression in battle-injured soldiers. *American Journal of Psychiatry* 163(10):1777–1783.
- Guillamondegui, O. D., S. A. Montgomery, F. T. Phibbs, M. L. McPheeters, P. T. Alexander, R. N. Jerome, J. N. McKoy, J. J. Seroogy, J. J. Eicken, S. Krishnaswami, R. M. Salomon, and K. E. Hartmann. 2011. *Traumatic brain injury and depression*. Rockville, MD: Agency for Health Care Research and Quality.
- Gulliver, S. B., and L. E. Steffen. 2010. *Towards integrated treatments for PTSD and substance use disorders*. Washington, DC: National Center for PTSD.
- Haney, E., M. O’Neil, S. Carson, A. Low, K. Peterson, L. Dennesson, C. Oleksiewicz, and D. Kansagara. 2012. *Suicide risk factors and risk assessment tools: A systematic review*. Portland, OR: VA Evidence-Based Synthesis Program.
- Hasanovic, M., and I. Pajevic. 2010. Religious moral beliefs as mental health protective factor of war veterans suffering from PTSD, depressiveness, anxiety, tobacco and alcohol abuse in comorbidity. *Psychiatria Danubina* 22(2):203–210.
- Hawton, K., K. G. Witt, T. L. T. Salisbury, E. Arensman, D. Gunnell, P. Hazell, E. Townsend, and K. van Heeringen. 2016. Psychosocial interventions following self-harm in adults: A systematic review and meta-analysis. *Lancet Psychiatry* 3(8):740–750.
- Hides, L., S. Samet, and D. I. Lubman. 2010. Cognitive behaviour therapy (CBT) for the treatment of co-occurring depression and substance use: Current evidence and directions for future research. *Drug and Alcohol Review* 29(5):508–517.
- Himmelfarb, N., D. Yaeger, and J. Mintz. 2006. Posttraumatic stress disorder in female veterans with military and civilian sexual trauma. *Journal of Traumatic Stress* 19(6):837–846.
- Hoffmire, C., B. Stephens, S. Morley, C. Thompson, J. Kemp, and R. M. Bossarte. 2016. VA suicide prevention applications network: A national health care system-based suicide event tracking system. *Public Health Reports* 131(6):816–821.
- Hoge, C. W., C. A. Castro, S. C. Messer, D. McGurk, D. I. Cotting, and R. L. Koffman. 2004. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine* 351(1):13–22.
- Horvath, T., K. Misra, A. K. Epner, and G. M. Cooper. 2015. *The diagnostic criteria for substance use disorders (addiction)*. <http://www.amhc.org/1408-addictions/article/48502-the-diagnostic-criteria-for-substance-use-disorders-addiction> (accessed May 6, 2016).
- Ilgen, M. A., J. F. McCarthy, R. V. Ignacio, A. S. Bohnert, M. Valenstein, F. C. Blow, and I. R. Katz. 2012. Psychopathology, Iraq and Afghanistan service, and suicide among Veterans Health Administration patients. *Journal of Consulting and Clinical Psychology* 80(3):323–330.

- IOM (Institute of Medicine). 2011. *Clinical practice guidelines we can trust*. Edited by R. Graham, M. Mancher, D. M. Wolman, S. Greenfield, and E. Steinberg. Washington, DC: The National Academies Press.
- IOM. 2012. *Treatment for posttraumatic stress disorder in military and veteran populations: Initial assessment*. Washington, DC: Institute of Medicine.
- IOM. 2013a. *Returning home from Iraq and Afghanistan: Assessment of readjustment needs of veterans, service members, and their families*. Washington, DC: The National Academies Press.
- IOM. 2013b. *Substance use disorders in the U.S. armed forces*. Washington, DC: The National Academies Press.
- IOM. 2014a. *Preventing psychological disorders in service members and their families: An assessment of programs*. Washington, DC: The National Academies Press.
- IOM. 2014b. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: The National Academies Press.
- IOM and NRC (National Research Council). 2007. *PTSD compensation and military service*. Washington, DC: The National Academies Press.
- Kang, H. K., and T. A. Bullman. 2009. Is there an epidemic of suicides among current and former U.S. military personnel? *Annals of Epidemiology* 19(10):757–760.
- Kang, H. K., T. A. Bullman, D. J. Smolenski, N. A. Skopp, G. A. Gahm, and M. A. Reger. 2015. Suicide risk among 1.3 million veterans who were on active duty during the Iraq and Afghanistan wars. *Annals of Epidemiology* 25(2):96–100.
- Kang, S., C. M. Aldwin, S. Choun, and A. Spiro, 3rd. 2016. A life-span perspective on combat exposure and PTSD symptoms in later life: Findings from the VA Normative Aging Study. *Gerontologist* 56(1):22–32.
- Kelsall, H. L., M. Wijesinghe, M. Creamer, D. McKenzie, A. Forbes, M. Page, and M. Sim. 2015. Alcohol use and substance use disorders in Gulf War, Afghanistan, and Iraq War veterans compared with nondeployed military personnel. *Epidemiologic Reviews* 37(1):38–54.
- Kemp, J., and R. Bossarte. 2012. *Suicide data report, 2012*. Washington, DC: Department of Veterans Affairs.
- Kessler, R., P. Berglund, O. Demler, R. Jin, K. Merikangas, and E. Walters. 2005. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62(6):593–602.
- Kilpatrick, D. G., H. S. Resnick, M. E. Milanak, M. W. Miller, K. M. Keyes, and M. J. Friedman. 2013. National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of Traumatic Stress* 26(5):537–547.
- Kimerling, R., A. E. Street, J. Pavao, M. W. Smith, R. C. Cronkite, T. H. Holmes, and S. M. Frayne. 2010. Military-related sexual trauma among Veterans Health Administration patients returning from Afghanistan and Iraq. *American Journal of Public Health* 100(8):1409–1412.
- Kolkow, T. T., J. L. Spira, J. S. Morse, and T. A. Grieger. 2007. Post-traumatic stress disorder and depression in health care providers returning from deployment to Iraq and Afghanistan. *Military Medicine* 172(5):451–455.
- Kopacz, M. S. 2014. The spiritual health of veterans with a history of suicide ideation. *Health Psychology and Behavioral Medicine* 2(1):349–358.
- Koren, D., D. Norman, A. Cohen, J. Berman, and E. M. Klein. 2005. Increased PTSD risk with combat-related injury: A matched comparison study of injured and uninjured soldiers experiencing the same combat events. *American Journal of Psychiatry* 162(2):276–228.
- Kroenke, K., R. L. Spitzer, and J. B. Williams. 2001. The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine* 16(9):606–613.
- Kroenke, K., R. L. Spitzer, and J. B. Williams. 2003. The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care* 41(11):1284–1292.
- Lang, A. J., P. P. Schnurr, S. Jain, F. He, R. D. Walser, E. Bolton, D. M. Benedek, S. B. Norman, P. Sylvers, L. Flashman, J. Strauss, R. Raman, and K. M. Chard. 2016. Randomized controlled trial of acceptance and commitment therapy for distress and impairment in OEF/OIF/OND veterans. *Psychological Trauma* 9(Suppl 1):74–84.
- Lanier, D., and S. Ko. 2008. *Screening in primary care settings for illicit drug use: Assessment of screening instruments*. Rockville, MD: Agency for Healthcare Research and Quality.
- Lapierre, C. B., A. F. Schwegler, and B. J. LaBauve. 2007. Posttraumatic stress and depression symptoms in soldiers returning from combat operations in Iraq and Afghanistan. *Journal of Traumatic Stress* 20(6):933–943.
- Larson, G. E., P. S. Hammer, T. L. Conway, E. A. Schmied, M. R. Galarneau, P. Konoske, J. A. Webb-Murphy, K. J. Schmitz, N. Edwards, and D. C. Johnson. 2011. Predeployment and in-theater diagnoses of American military personnel serving in Iraq. *Psychiatric Services* 62(1):15–21.

- LeardMann, C. A., A. Pietrucha, K. M. Magruder, B. Smith, M. Murdoch, I. G. Jacobson, M. A. Ryan, G. Gackstetter, T. C. Smith, and M. C. S. Team. 2013a. Combat deployment is associated with sexual harassment or sexual assault in a large, female military cohort. *Women's Health Issues* 23(4):e215–e223.
- LeardMann, C. A., T. M. Powell, T. C. Smith, M. R. Bell, B. Smith, E. J. Boyko, T. I. Hooper, G. D. Gackstetter, M. Ghamsary, and C. W. Hoge. 2013b. Risk factors associated with suicide in current and former U.S. military personnel. *JAMA* 310(5):496–506.
- Lemaire, C. M., and D. P. Graham. 2011. Factors associated with suicidal ideation in OEF/OIF veterans. *Journal of Affective Disorders* 130(1–2):231–238.
- Levin, A. P., S. B. Kleinman, and J. S. Adler. 2014. *DSM-5* and posttraumatic stress disorder. *Journal of the American Academy of Psychiatry and the Law Online* 42(2):146–158.
- Lew, H. L., R. D. Vanderploeg, D. F. Moore, K. Schwab, L. Friedman, J. A. Yesavage, T. M. Keane, D. L. Warden, and B. J. Sigford. 2008. Overlap of mild TBI and mental health conditions in returning OIF/OEF service members and veterans. *Journal of Rehabilitation Research & Development* 45(3):xi–xvi.
- Logan, J. E., K. A. Fowler, N. P. Patel, and K. M. Holland. 2016. Suicide among military personnel and veterans aged 18–35 years by county—16 states. *American Journal of Preventive Medicine* 51(5):S197–S208.
- MacGregor, A. J., R. A. Shaffer, A. L. Dougherty, M. R. Galarneau, R. Raman, D. G. Baker, S. P. Lindsay, B. A. Golomb, and K. S. Corson. 2009. Psychological correlates of battle and nonbattle injury among Operation Iraqi Freedom veterans. *Military Medicine* 174(3):224–231.
- Maguen, S., D. S. Vogt, L. A. King, D. W. King, B. T. Litz, S. J. Knight, and C. R. Marmar. 2011. The impact of killing on mental health symptoms in Gulf War veterans. *Psychological Trauma* 3(1):21–26.
- Maguen, S., B. Cohen, L. Ren, J. Bosch, R. Kimerling, and K. Seal. 2012. Gender differences in military sexual trauma and mental health diagnoses among Iraq and Afghanistan veterans with posttraumatic stress disorder. *Womens Health Issues* 22(1):e61–e66.
- Management of Major Depressive Disorder Working Group. 2016. *VA/DoD clinical practice guideline for the management of major depressive disorder*. Washington, DC: Department of Defense and Department of Veterans Affairs.
- Management of Substance Use Disorders Work Group. 2015. *VA/DoD clinical practice guideline for the management of substance use disorders*. Washington, DC: Department of Defense and Department of Veterans Affairs.
- Mann, J. J., A. Apter, J. Bertolote, A. Beautrais, D. Currier, A. Haas, U. Hegerl, J. Lonnqvist, K. Malone, A. Marusic, L. Mehlum, G. Patton, M. Phillips, W. Rutz, Z. Rihmer, A. Schmidtke, D. Shaffer, M. Silverman, Y. Takahashi, A. Varnik, D. Wasserman, P. Yip, and H. Hendin. 2005. Suicide prevention strategies: A systematic review. *JAMA* 294(16):2064–2074.
- McGuinness, T. M., and J. R. Waldrop. 2015. Adverse childhood experiences and the mental health of veterans. *Journal of Psychosocial Nursing & Mental Health Services* 53(6):23–26.
- Milanak, M. E., D. F. Gros, K. M. Magruder, O. Brawman-Mintzer, and B. C. Frueh. 2013. Prevalence and features of generalized anxiety disorder in Department of Veterans Affairs primary care settings. *Psychiatry Research* 209(2):173–179.
- Miller, M. W., E. J. Wolf, D. Kilpatrick, H. Resnick, B. P. Marx, D. W. Holowka, T. M. Keane, R. C. Rosen, and M. J. Friedman. 2013. The prevalence and latent structure of proposed *DSM-5* posttraumatic stress disorder symptoms in U.S. national and veteran samples. *Psychological Trauma* 5(6):501.
- Milliken, C. S., J. L. Auchterlonie, and C. W. Hoge. 2007. Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *JAMA* 298(18):2141–2148.
- Montgomery, K. L., J. S. Kim, and C. Franklin. 2011. Acceptance and commitment therapy for psychological and physiological illnesses: A systematic review for social workers. *Health & Social Work* 36(3):169–181.
- Morland, L., and J. Ruzek. 2015. Technology and PTSD care: An update. *PTSD Research Quarterly* 26(2):1–3.
- Moyer, C. S. 2013. *DSM-5 guides doctors on suicide risks and prevention*. <http://www.amednews.com/article/20130826/health/130829985/6/> (accessed November 10, 2015).
- National Center for PTSD. 2010a. *Report of (VA) consensus conference: Practice recommendations for treatment of veterans with comorbid substance abuse and PTSD*. Washington, DC: Department of Veterans Affairs.
- National Center for PTSD. 2010b. *Report of (VA) consensus conference: Practice recommendations for treatment of veterans with comorbid TBI, pain, and PTSD*. Washington, DC: National Center for PTSD, Department of Veterans Affairs.
- National Center for PTSD. 2014. *Using the PTSD checklist for DSM-IV (PCL)*. Washington, DC: Department of Veterans Affairs.
- NIAAA (National Institute on Alcohol Abuse and Alcoholism). 2008. *Helping patients who drink too much: A clinician's guide*. Washington, DC: National Institutes of Health.
- NIH (National Institutes of Health). 2015. *Alcohol use disorder: A comparison between DSM-IV and DSM-5*. <https://pubs.niaaa.nih.gov/publications/dsmfactsheet/dsmfact.pdf> (accessed November 7, 2017).

- Nock, M. K., C. A. Deming, C. S. Fullerton, S. E. Gilman, M. Goldenberg, R. C. Kessler, J. E. McCarroll, K. A. McLaughlin, C. Peterson, and M. Schoenbaum. 2013. Suicide among soldiers: A review of psychosocial risk and protective factors. *Psychiatry* 76(2):97–125.
- O'Connor, E., B. Gaynes, B. U. Burda, C. Williams, and E. P. Whitlock. 2013. *Screening for suicide risk in primary care: A systematic evidence review for the U.S. Preventive Services Task Force*. Rockville, MD: Agency for Healthcare Research and Quality.
- O'Donnell, M. L., N. Alkemade, A. Nickerson, M. Creamer, A. C. McFarlane, D. Silove, R. A. Bryant, and D. Forbes. 2014. Impact of the diagnostic changes to post-traumatic stress disorder for DSM-5 and the proposed changes to ICD-11. *British Journal of Psychiatry* 205(3):230–235.
- Ogrysko, N. 2017. *Lawmakers see progress in veterans crisis hotline, but it's still far from "fixed."* <https://federalnewsradio.com/hearingoversight/2017/04/lawmakers-see-progress-veterans-crisis-hotline-still-far-fixed/> (accessed May 11, 2017).
- Ost, L. G. 2014. The efficacy of acceptance and commitment therapy: An updated systematic review and meta-analysis. *Behaviour Research and Therapy* 61:105–121.
- Otis, J., R. McGlinchey, J. Vasterling, and R. Kerns. 2011. Complicating factors associated with mild traumatic brain injury: Impact on pain and posttraumatic stress disorder treatment. *Journal of Clinical Psychology* 18(2):145–154.
- Pani Pier, P., R. Vacca, E. Trogu, L. Amato, and M. Davoli. 2010. Pharmacological treatment for depression during opioid agonist treatment for opioid dependence. *Cochrane Database of Systematic Reviews* (9):CD008373.
- Peterson, A. L., V. Wong, M. F. Haynes, A. C. Bush, and J. E. Schillerstrom. 2010. Documented combat-related mental health problems in military noncombatants. *Journal of Traumatic Stress* 23(6):674–681.
- Pettinati, H. M., D. W. Oslin, K. M. Kampman, W. D. Dundon, H. Xie, T. L. Gallis, C. A. Dackis, and C. P. O'Brien. 2010. A double-blind, placebo-controlled trial combining sertraline and naltrexone for treating co-occurring depression and alcohol dependence. *American Journal of Psychiatry* 167(6):668–675.
- Phillips, C. J., C. A. LeardMann, G. R. Gumb, and B. Smith. 2010. Risk factors for posttraumatic stress disorder among deployed US male Marines. *BMC Psychiatry* 10(1):52.
- Pickett, T., D. Rothman, E. F. Crawford, M. Brancu, J. A. Fairbank, and H. S. Kudler. 2015. Mental health among military personnel and veterans. *North Carolina Medical Journal* 76(5):299–306.
- Pietrzak, R. H., J. M. Whealin, R. L. Stotzer, M. B. Goldstein, and S. M. Southwick. 2011. An examination of the relation between combat experiences and combat-related posttraumatic stress disorder in a sample of Connecticut OEF-OIF veterans. *Journal of Psychiatric Research* 45(12):1579–1584.
- Polusny, M. A., C. R. Erbes, M. Murdoch, P. A. Arbsi, P. Thuras, and M. B. Rath. 2011. Prospective risk factors for new-onset post-traumatic stress disorder in National Guard soldiers deployed to Iraq. *Psychological Medicine* 41(4):687–698.
- Prins, A., P. Ouimette, R. Kimerling, R. P. Camerond, D. S. Hugelshofer, J. Shaw-Hegwer, A. Thrailkill, F. D. Gusman, and J. I. Sheikh. 2004. The Primary Care PTSD screen (PC-PTSD): Development and operating characteristics. *Primary Care Psychiatry* 9(1):9–14.
- Qaseem, A., F. Forland, F. Macbeth, G. Ollenschläger, S. Phillips, and P. van der Wees. 2012. Guidelines international network: Toward international standards for clinical practice guidelines. *Annals of Internal Medicine* 156(7):525–531.
- Ramchand, R., T. L. Schell, B. R. Karney, K. C. Osilla, R. M. Burns, and L. B. Caldarone. 2010. Disparate prevalence estimates of PTSD among service members who served in Iraq and Afghanistan: Possible explanations. *Journal of Traumatic Stress* 23(1):59–68.
- Ramchand, R., R. Rudavsky, S. Grant, T. Tanielian, and L. Jaycox. 2015. Prevalence of, risk factors for, and consequences of posttraumatic stress disorder and other mental health problems in military populations deployed to Iraq and Afghanistan. *Current Psychiatry Reports* 17(5):37.
- Riviere, L. A., A. Kendall-Robbins, D. McGurk, C. A. Castro, and C. W. Hoge. 2011. Coming home may hurt: Risk factors for mental ill health in U.S. reservists after deployment in Iraq. *British Journal of Psychiatry* 198(2):136–142.
- Rosen, M. I. 2010. Compensation examinations for PTSD—An opportunity for treatment? *Journal of Rehabilitation Research & Development* 47(5):xxv–xxii.
- Rudd, M. D., C. J. Bryan, E. G. Wertenberger, A. L. Peterson, S. Young-McCaughan, J. Mintz, S. R. Williams, K. A. Arne, J. Breitbach, K. Delano, E. Wilkinson, and T. O. Bruce. 2015. Brief cognitive-behavioral therapy effects on post-treatment suicide attempts in a military sample: Results of a randomized clinical trial with 2-year follow-up. *American Journal of Psychiatry* 172(5):441–449.
- Saitz, R., T. P. Palfai, D. M. Cheng, D. P. Alford, J. A. Bernstein, C. A. Lloyd-Travaglini, S. M. Meli, C. E. Chaisson, and J. H. Samet. 2014. Screening and brief intervention for drug use in primary care: The ASPIRE randomized clinical trial. *JAMA* 312(5):502–513.
- SAMHSA (Substance Abuse and Mental Health Services Administration). 2015. *The CBHSQ report: 1 in 15 veterans had a substance use disorder in the past year*. Rockville, MD: U.S. Health and Human Services.

- SAMHSA. 2016. *CBHSQ data review: Prevalence of past year substance use and mental illness by veteran status in a nationally representative sample*. Rockville, MD: U.S. Health and Human Services.
- Sandweiss, D., D. Slymen, C. LeardMann, B. Smith, M. White, E. Boyko, T. Hooper, G. Gackstetter, P. Amoroso, and T. Smith. 2011. Preinjury psychiatric status, injury severity, and postdeployment posttraumatic stress disorder. *Archives of General Psychiatry* 68(5):496–504.
- Seal, K. H., T. J. Metzler, K. S. Gima, D. Bertenthal, S. Maguen, and C. R. Marmar. 2009. Trends and risk factors for mental health diagnoses among Iraq and Afghanistan veterans using Department of Veterans Affairs health care, 2002–2008. *American Journal of Public Health* 99(9):1651–1658.
- Seal, K. H., G. Cohen, A. Waldrop, B. E. Cohen, S. Maguen, and L. Ren. 2011. Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001–2010: Implications for screening, diagnosis and treatment. *Drug & Alcohol Dependence* 116(1–3):93–101.
- Society of Clinical Psychology. 2016. *Acceptance and commitment therapy for depression*. <http://www.div12.org/psychological-treatments/treatments/acceptance-and-commitment-therapy-for-depression/> (accessed April 4, 2017).
- Stanley, B., and G. K. Brown. 2008. *Safety plan treatment manual to reduce suicide risk: Veteran version*. Washington, DC: Department of Veterans Affairs.
- Stein, M. B., and J. Sareen. 2015. Clinical practice. Generalized anxiety disorder. *New England Journal of Medicine* 373(21):2059–2068.
- Stone, M., T. Laughren, M. L. Jones, M. Levenson, P. C. Holland, A. Hughes, T. A. Hammad, R. Temple, and G. Rochester. 2009. Risk of suicidality in clinical trials of antidepressants in adults: Analysis of proprietary data submitted to U.S. Food and Drug Administration. *BMJ* 339:b2880.
- Suris, A., and L. Lind. 2008. Military sexual trauma: A review of prevalence and associated health consequences in veterans. *Trauma, Violence, & Abuse* 9(4):250–269.
- Swords to Plowshares. 2016. *Presentation to the Commission on Care*. <https://commissiononcare.sites.usa.gov/files/2016/03/Presentation-on-OTH-Discharges.pdf> (accessed July 20, 2016).
- Tanielian, T. L., and L. H. Jaycox. 2008. *Invisible wounds of war. Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: RAND Corporation.
- Tarrier, N., K. Taylor, and P. Gooding. 2008. Cognitive-behavioral interventions to reduce suicide behavior: A systematic review and meta-analysis. *Behavior Modification* 32(1):77–108.
- Thomas, J. L., J. E. Wilk, L. A. Riviere, D. McGurk, C. A. Castro, and C. W. Hoge. 2010. Prevalence of mental health problems and functional impairment among active component and national guard soldiers 3 and 12 months following combat in Iraq. *Archives of General Psychiatry* 67(6):614–623.
- VA (Department of Veterans Affairs). 2007. *Vista clinical reminders: User manual*. Washington, DC: Health Provider Systems Office of Information & Technology, Department of Veterans Affairs.
- VA. 2010. *VHA handbook 1160.03: Programs for veterans with post-traumatic stress disorder*. Washington, DC: Veterans Health Administration.
- VA. 2011. *What is major depression?* http://www.mirecc.va.gov/visn22/depression_education.pdf (accessed September 28, 2015).
- VA. 2015a. *How common is PTSD?* <http://www.ptsd.va.gov/PTSD/public/PTSD-overview/basics/how-common-is-ptsd.asp> (accessed June 11, 2015).
- VA. 2015b. *Military sexual trauma*. <http://www.mentalhealth.va.gov/msthome.asp> (accessed September 25, 2015).
- VA. 2015c. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2016a. *VA suicide prevention program: Facts about veteran suicide*. Washington, DC: Department of Veterans Affairs.
- VA. 2016b. *VA/DoD clinical practice guidelines*. Washington, DC: Department of Veterans Affairs.
- VA. 2017a. *Analysis of VA health care utilization among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans: Cumulative from 1st qtr FY 2002 through 3rd qtr FY 2015 (October 1, 2001–June 30, 2015)*. Washington, DC: Department of Veterans Affairs.
- VA. 2017b. *Response to committee request for information*. Washington, DC: Department of Veterans Affairs.
- VA. 2017c. *VA fixes veterans crisis line*. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2872> (accessed May 11, 2017).
- VA. 2017d. *VA secretary announces intention to expand mental health care to former service members with other-than-honorable discharges and in crisis*. Washington, DC: Department of Veterans Affairs. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2867> (accessed November 7, 2017).
- VA/DoD. 2009. *Management of substance use disorders (SUD)*. Washington, DC: Management of Substance Use Disorders Working Group, Department of Veterans Affairs and Department of Defense.

- VA/DoD. 2010. *VA/DoD clinical practice guideline for management of post-traumatic stress*. Washington, DC: Management of Post-Traumatic Stress Working Group, Department of Defense and Department of Veterans Affairs.
- VA and DoD. 2013. *VA/DoD clinical practice guideline for the assessment and management of suicide risk*. Washington, DC: Department of Veterans Affairs and Department of Defense.
- VA Office of Inspector General. 2017. *Healthcare inspection: Evaluation of the Veterans Health Administration Veterans Crisis Line*. Washington, DC: VA Office of Inspector General.
- Vasterling, J. J., S. P. Proctor, M. J. Friedman, C. W. Hoge, T. Heeren, L. A. King, and D. W. King. 2010. PTSD symptom increases in Iraq-deployed soldiers: Comparison with nondeployed soldiers and associations with baseline symptoms, deployment experiences, and postdeployment stress. *Journal of Traumatic Stress* 23(1):41–51.
- Watkins, K., and H. Pincus. 2011. *Veterans Health Administration mental health program evaluation: Capstone report*. Arlington, VA: RAND Corporation.
- Weathers, F. W., D. D. Blake, P. P. Schnurr, D. G. Kaloupek, B. P. Marx, and T. M. Keane. 2013a. *The clinician-administered PTSD scale for DSM-5 (CAPS-5)*. Washington, DC: Department of Veterans Affairs.
- Weathers, F. W., B. T. Litz, T. M. Keane, P. A. Palmieri, B. P. Marx, and P. P. Schnurr. 2013b. *The PTSD checklist for DSM-5 (PCL-5)*. Washington, DC: Department of Veterans Affairs.
- Wells, T. S., C. A. LerdMann, S. O. Fortuna, B. Smith, T. C. Smith, M. A. Ryan, E. J. Boyko, and D. Blazer. 2010. A prospective study of depression following combat deployment in support of the wars in Iraq and Afghanistan. *American Journal of Public Health* 100(1):90–99.
- Youssef, N. A., K. T. Green, J. C. Beckham, and E. B. Elbogen. 2013a. A 3-year longitudinal study examining the effect of resilience on suicidality in veterans. *Annals of Clinical Psychiatry* 25(1):59–66.
- Youssef, N. A., K. T. Green, E. A. Dedert, J. S. Hertzberg, P. S. Calhoun, M. F. Dennis, and J. C. Beckham. 2013b. Exploration of the influence of childhood trauma, combat exposure, and the resilience construct on depression and suicidal ideation among U.S. Iraq/Afghanistan era military personnel and veterans. *Archives of Suicide Research* 17(2):106–122.
- Zettle, R. 2015. Acceptance and commitment therapy for depression. *Current Opinion in Psychology* 2:65–69.
- Zoellner, L. A., M. A. Bedard-Gilligan, J. J. Jun, L. H. Marks, and N. M. Garcia. 2013. The evolving construct of posttraumatic stress disorder (PTSD): DSM-5 criteria changes and legal implications. *Psychological Injury and Law* 6(4):277–289.
- Zubin, J., and B. Spring. 1977. Vulnerability: A new view of schizophrenia. *Journal of Abnormal Psychology* 86(2):103–126.

5

Methodology

This chapter describes the mixed methodologic approaches that the committee used to assess Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans' access to the mental health services at the Department of Veterans Affairs (VA) as well as the quality of those services. First, the full scope of efforts taken to plan the study and gather appropriate evidence is outlined. Next, the key methods used to carry out the information-gathering activities—developing and fielding a survey, conducting multiple site visits, and conducting a literature review—are described. Finally, the chapter concludes with some overarching limitations associated with the data collection and analyses.

APPROACH

The study was guided by a committee with expertise in epidemiology, health services research, internal medicine, mental health nursing, psychiatry, psychology, statistics, social work, survey research, and qualitative and mixed-methods research, among other important subject areas. As is the practice of National Academies of Sciences, Engineering, and Medicine committees, this committee held public meetings for data-gathering purposes as well as closed meetings during which the committee deliberated about the evidence and about its conclusions and recommendations. This final report also underwent a blinded peer-review process prior to its publication.

The purpose of this study was to examine access to and the quality of the mental health care that the VA provides to OEF/OIF/OND veterans and to determine the extent to which veterans are afforded mental health treatment choices and offered a full range of necessary mental health services. To achieve this, the committee developed a mixed-methods approach, conducting both qualitative and quantitative original research (specifically, qualitative data collection from site visits and a survey of OEF/OIF/OND veterans). Prior to the original data collection and several times over the course of the study, the committee also completed a comprehensive literature review of existing research. In addition, the

committee reviewed results from VA-conducted surveys that assessed patient and provider satisfaction with VA mental health care services and heard presentations by experts from the VA and other organizations describing the VA health care system, how it is organized, and the types of benefits veterans are able to acquire.

The National Academies, in consultation with the committee, selected a subcontractor to conduct the survey and site visit tasks. The committee provided oversight to the subcontractor. Early in the study process the National Academies solicited proposals from potential subcontractors. The subcontractor chosen to assist the committee was Westat, a research corporation that consults in statistical design, qualitative and quantitative data collection and management, and research analysis work. Westat proposed a survey design that included a sampling plan, instrument development plan, a data collection plan, and a final analysis report based on the survey results. Westat also assisted with the development of qualitative interview protocols for site visits, planned and executed the site visits, and submitted individual site visit reports as well as a final qualitative analysis report¹ across all sites.

The National Academies study began on September 30, 2013, and took 54 months to complete. The committee met 16 times over the course of the study to plan its approach to the charge; to develop the survey and site visit methods, instruments, and analysis plans in consultation with Westat; to obtain information from invited speakers and members of the public during four information-gathering sessions; to deliberate on the body of evidence from the survey, site visits, literature, and other sources of information; to draft its report; and to develop and come to consensus on the findings, conclusions, and recommendations.

To ensure that all research with human subjects was conducted in accordance with all federal, institutional, and ethical guidelines, all survey and site visit materials were approved by both the Westat and National Academies institutional review boards. The National Academies also acquired Paperwork Reduction Act clearance for the protocols from the Office of Management and Budget, which is required of all federally funded data collection projects to ensure they do not overburden the public with federally sponsored data collections. A certificate of confidentiality from the National Institutes of Health was also obtained, which further protects the privacy of study participants enrolled in sensitive, health-related research.

SURVEY METHODS

This section describes the quantitative research (survey) portion of the study. The committee conducted a survey of VA-eligible OEF/OIF/OND veterans, some who use VA health services and some who do not. Among those who are not using VA services (VA non-users), the survey assessed potential barriers to acquiring VA mental health care. VA-eligible OEF/OIF/OND veterans who *are* using mental health services were asked about their experiences with the VA and were used to support key analytic comparisons with the VA non-users.

The committee monitored and provided input on all phases of the survey work, including the sample and questionnaire designs, the data collection process, and the analyses of the data. Westat provided to the committee documentation during each phase, which the committee evaluated and as needed requested changes to the protocols and analyses. For the analytic phase, in addition to the summary tables of the data analyses, Westat provided to the committee the statistical analysis system (SAS) output and the

¹At the request of the VA, Westat also developed site-specific reports that were provided to the VA shortly after each site visit was completed to address any immediately actionable items that might pose a danger to staff and veterans if left unattended until the completion of this study. These reports were not a part of the committee's work, but were provided to the committee.

constructed variables. The committee used this body of information to review and validate Westat's analyses of the survey data. None of the information provided to the committee contained personally identifiable information.

Sample Design

Individuals eligible to participate in the survey were all U.S. civilians who served in the U.S. military during the time of OEF, OIF, or OND, from January 1, 2002, to December 31, 2014 (the war in Afghanistan began on October 7, 2001). In addition to including OEF/OIF/OND veterans who were deployed to Iraq or Afghanistan, the study population also included non-deployed veterans. The population eligible for the survey did not include those still on active duty, although it could include Reserve and National Guard members released from active duty, but still serving in those components. Table 5-3 shows that several cases separated or retired before January 1, 2002, or still on active duty were classified as ineligible.

A two-phase sample design was employed for the survey of OEF/OIF/OND veterans. Through a data use agreement, the VA provided the first-phase sample for the study, consisting of two data files. One file, containing 470,606 records, provided data for an approximate one-in-three sample of OEF/OIF/OND veterans who had served in-theater and, according to VA records, were alive on October 1, 2015. The data source for this file was the OEF/OIF/OND roster file. The second file, containing 724,738 records, provided data for a one-in-four sample of OEF/OIF/OND veterans who were not deployed to Iraq or Afghanistan in support of OEF/OIF/OND. The VA created this second file from multiple administrative data sources, and a veteran's demographic variables were included only if the veteran appeared in VA medical records. In preparing the first-phase sample files, the VA removed duplicate records that may have appeared in the multiple sources used. As described in Appendix A, ensuring that the combined data sources for the first-phase sample fully covered the target population of interest involved comparing the associated population size to VA projections of the number of OEF/OIF/OND veterans alive on September 30, 2015 (using Veteran Population Projection Model 2014). These comparisons indicated the coverage of the first-phase sample was consistent with other information available from the VA about the numbers of OEF/OIF/OND veterans. These first-phase sample files contained an identifier with no personally identifiable information (a non-PII identifier) for each veteran in the first-phase sample, along with other non-PII variables (such as age, gender, military-service characteristics, and use of VA health care services). The variables available from the VA did not include a determination of honorable, less than honorable, or dishonorable.

This information was used by Westat to stratify the first-phase sample into 13 strata based on sex (where possible), deployment status, and use of VA mental health services. For the purposes of the sample, users of VA mental health services were defined as veterans who met one of the following conditions in the 24 months prior to the date the sample was drawn:

- An encounter at a mental health stop code;
- Two or more encounters at a primary care stop code with a mental health *ICD-9* in any diagnostic position;
- Two or more encounters at an "other" stop code (for example, non-mental health or primary care) with a mental health *ICD-9* in any diagnostic position; or
- Any inpatient encounter with a mental health *ICD-9* in any diagnostic position.

TABLE 5-1 Second-Phase Stratification and Sample Sizes

Sampling Stratum	Total Sample
Stratum 1 (not deployed; nonuser mental health services; sex unavailable; age unavailable)	7,855
Stratum 2 (not deployed; user mental health services; female; <30)	145
Stratum 3 (not deployed; user mental health services; female; 30+)	510
Stratum 4 (not deployed; user mental health services; male; <30)	195
Stratum 5 (not deployed; user mental health services; male; 30+)	850
Stratum 6 (deployed; non-user mental health services; female; <30)	410
Stratum 7 (deployed; non-user mental health services; female; 30+)	1,535
Stratum 8 (deployed; non-user mental health services; male; <30)	970
Stratum 9 (deployed; non-user mental health services; male; 30+)	3,725
Stratum 10 (deployed; user mental health services; female; <30)	165
Stratum 11 (deployed; user mental health services; female; 30+)	545
Stratum 12 (deployed; user mental health services; male; <30)	605
Stratum 13 (deployed; user mental health services; male; 30+)	1,890
Total	19,400

The stratification allowed oversampling of female veterans, deployed veterans, and veterans who used VA mental health services. Stratification is often used in statistical surveys to improve the accuracy or precision of survey estimates by reducing sampling variance. On May 10, 2016, Westat selected a stratified second-phase sample of 19,400 veterans from the first-phase sample. The strata and corresponding sample sizes appear in Table 5-1. The total targeted sample size was 8,900 completed cases, which assumed a response rate of 46 percent across Web-based and computer-assisted telephone interview (CATI) data collection. That assumption led to the fielded sample size of 19,400.

The targeted response rate was estimated on the basis of recent VA surveys with similar methodology, including the Post-Deployment Afghanistan/Iraq Trauma Related Inventory of Traits Feasibility Study, the Survey of Veteran Enrollees' Health and Use of Health Care, and the National Health Study for a New Generation of U.S. Veterans, and the a survey conducted by the Wounded Warrior Project. Two sections below, Final Survey Dispositions and Response Rate and Study Limitations, provide details about the final response rate for the committee's survey.

Westat then provided the second-phase sample identifiers to the VA, which returned the identities and contact information for the veterans in the second-phase sample. Contact information included postal address, phone numbers, and Social Security numbers (SSNs). Once the SSNs were received back from the VA for the second-phase sample, a tracing file was created that was sent to Lexis Nexis to obtain updated phone numbers and postal addresses for use in data collection.

Appendix A contains the sampling and weighting plan, which provides additional details about the second-phase sample stratification variables and the stratum sample sizes and also contains additional details about the procedures used to weight the collected survey data and the results of a non-response bias analysis of resulting weighted estimates.

Questionnaire Design

The title of the survey was the *OEF/OIF/OND Veterans' Access to Health Services Survey*. The survey content was drawn from several existing surveys administered to military and veteran populations and from existing validated scales. The sources of the committee's survey items included the VA Survey of Healthcare Experiences of Patients Ambulatory Care, National Health Study for a New Generation of U.S. Veterans, National Survey of Veterans, National Comorbidity Study, Deployment

Risk and Resilience Inventory-2 (DRRI-2), Kessler-6, PTSD-PC (Primary Care PTSD screen), two-item Patient Health Questionnaire (PHQ-2), Alcohol Use Disorders Identification Test (AUDIT), and Drug Abuse Screening Test (DAST). For a complete list of sources the committee drew from to develop the survey questionnaire, see Appendix A.

The committee and Westat carefully reviewed those sources and selected the items that would appropriately address the study charge to examine unmet needs and barriers to receiving care among VA-eligible OEF/OIF/OND veterans, some who use VA health services and some who do not. As discussed in the sections that follow, the survey questionnaire includes a subset of questions asking the veteran about his or her mental health and well-being and about wartime experiences. These questions were necessary to determine the factors that underlie veterans' mental health needs and their use of services.

Assessment of Warzone Stress Exposure

When the committee considered questions about warzone exposure for the survey, it determined that the available scales did not fit well into the survey it was developing. We felt that it was particularly important that the survey include a rigorous assessment of combat/warzone stress exposure because, whatever our findings would be on the need for and use of services and the differences in users and non-users of the VA, a predictable question would be whether and how these results might differ among those more or less exposed to war. Although various surveys conducted by the VA and the Department of Defense included a few individual items to assess specific stressors, none of these were developed using sophisticated psychometric analyses to develop indices or scales covering the full range of stressors highlighted in the literature. One instrument that was developed using psychometric methods and considered by the committee was the DRRI. It was developed by the National Center for PTSD (NCPTSD) by King et al. (2006), then updated to the DRRI-2, as a comprehensive measure of the various dimensions of warzone stress exposure specifically focused on those who served in OEF/OIF/OND (Vogt et al., 2013). However, this instrument was too long to be included in its entirety in the committee's survey (17 scales with over 200 questions). So, at the committee's request, staff at NCPTSD conducted an analysis of the DRRI-2 using the same data used on the development and validation of these measures. The intent of the analysis was to create a new, condensed scale of warzone stress exposure for the committee to include in its survey. NCPTSD completed stepwise regression to select a subset of questions from three DRRI-2 scales (Aftermath of Battle, Combat Experiences, and Perceived Threat). The subset was to account for at least 80 percent of the variance in the total scale and use approximately 25 percent (or less) of the total items from the selected scales. The committee reviewed NCPTSD's results and chose a subset of questions to use for its study.

The results generated four options for the committee to consider. Among the options, the percent of variance accounted for by the items selected ranged between 90 and 96 percent. Upon reviewing the four options, the committee decided to use a scale composed of nine questions. The percent of variance in the total score accounted for by these nine questions was 96 percent, assuring us that our shortened scale corresponded very closely with the original DRRI-2 scale. In addition, the committee decided to have the lead-in question to those nine items ask the veteran respondent to consider *all* deployment experiences, not just the most recent one (a modification that had already been used successfully by others using the DRRI-2).

Summary of Survey Content

The survey is composed of eight sections, described below. The final survey questionnaire, including the sources of all screeners and questions used, can be found in Appendix A. Some sections are asked

only of certain user groups (VA user, non-user, positive need, negative need). Figure 5-1 shows each section of the survey and every path a veteran would follow based on his or her answers to the Use of VA Services and Screeners sections (see Appendix A).

- **Military History and Demographics.** The questions in this section are asked of all veterans and cover basic military history, including the branches served in, the number of deployments, and experiences during deployments and also demographic information, including age, education, and employment status.
- **Use of VA Services.** The questions in this section are asked of all veterans and cover use of VA benefits and services. The responses to these questions determined whether a veteran would fall into the VA user or non-user group. Veterans who answered affirmatively to having used mental or behavioral health care through their VA primary care provider, a VA mental health treatment facility, or a Vet Center in the past 24 months, or if they indicated they used the VA for any mental or behavior health services (inpatient, outpatient, group therapy, psychotherapy, social skills training, or rehabilitation programs), were placed into the VA user group. An expanded discussion on need and user groups can be found later in the chapter.
- **Mental Health and Well-Being.** The questions in this section are asked of all veterans. It contains the mental health screeners that suggest whether a veteran is in need of mental health services.² The screeners included the scales listed below. The corresponding question number for each of the screeners in the questionnaire is given in parentheses. The full questionnaire can be found in Appendix A:
 - Kessler-6 (to assess symptoms of nonspecific psychological distress) (Q26)
 - A Kessler-6 score greater than or equal to 13 was considered positive
 - PC-PTSD (to assess symptoms of PTSD) (Q27)
 - A PC-PTSD score greater than or equal to 3 was considered positive
 - PHQ-2 (to assess symptoms of depression) (Q28)
 - A PHQ-2 score greater than or equal to 3 was considered positive
 - AUDIT 10 (to assess symptoms of alcohol misuse) (Q29–Q38)
 - An AUDIT 10 score greater than or equal to 16 was considered positive
 - DAST (to assess symptoms of drug abuse) (Q39–Q48)
 - A DAST score greater than or equal to 3 was considered positive

The questionnaire also included a question about the veteran's perceived need for professional help (Q49), and questions asking whether the veteran has been told by a health professional in the past 24 months that he or she has PTSD, depression, alcohol dependence, drug dependence, any anxiety disorder, traumatic brain injury, or any other mental or behavioral health issue (Q50).

- **Access to Services.** The questions in this section are asked of veterans who use VA mental health services and veterans who screen positive for a mental health need.³
- **Experience with VA Mental Health Services.** The questions in this section are asked of veterans who use VA mental health services and veterans who screen positive for a mental health need,

²These scales do not determine a condition; they assess the presence of symptoms that suggest the possibility of having a condition and the need for further assessment by a mental health professional to determine a diagnosis and whether there is a need for treatment.

³Veterans who screened positive for a mental health need either screened positive on one or more mental health screeners, or reported receiving a diagnosis in the previous 24 months (or both).

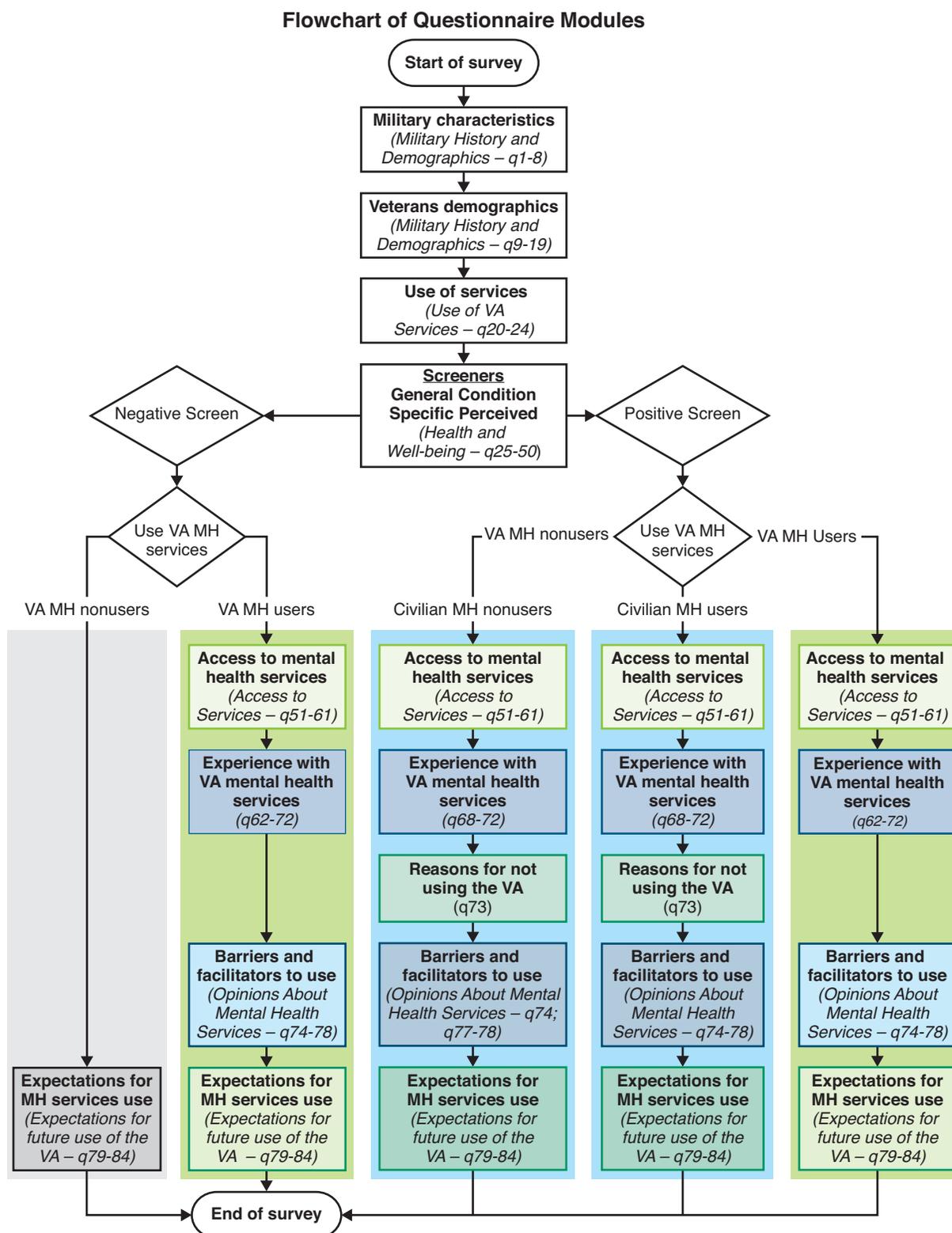


FIGURE 5-1 Flowchart of questionnaire modules.

though veterans who screen positive but do not use VA mental health services only received a portion of the section.

- **Reasons for Not Using the VA.** The questions in this section are asked of veterans who screen positive for a mental health need but do not use VA mental health care. This section consists only of an 11-item list of possible reasons for not using VA care for mental health issues.
- **Opinions About Mental Health Services.** The questions in this section are asked of veterans who use VA mental health services and veterans who screen positive for a mental health need.
- **Expectations for Future Use of the VA.** The questions in this section are asked of all veterans.

The questionnaire was pretested using cognitive interviews before the OEF/OIF/OND survey was administered in the field. Nine veterans participated in these interviews, which included filling out a paper version of the questionnaire and answering questions about their experience taking the survey. Veterans were asked how easy or hard the questions were to understand and answer, and about the clarity of instructions and terms used in the questionnaire. The pretest results were used to finalize the survey questions. A copy of the final survey instrument containing data annotations (for example, variable names and response values) can be found in Appendix A.

Data Collection Approach

The multi-mode data collection approach included having the sampled veterans fill out a Web survey and following up non-respondents with telephone calls and having them complete a CATI. The sampled veterans were first contacted and invited to participate in the Web survey. The veterans were mailed an invitation letter that contained the Web survey URL and each veteran's unique access code to the survey. Two weeks after the initial invitation mailing, non-respondents received the first of three weekly reminders via U.S. postal mail encouraging their participation in the survey.

Beginning in week 6 of the data collection field period, all non-respondents to the Web survey were moved to the telephone phase of the study. The CATI interviews were expected to be in the field for approximately 10 weeks in order for all veterans to be contacted a sufficient number of times. The original plan going into the data collection is shown in Figure 5-2 below.

The data collection schedule was initially planned as a 6-week Web survey phase to be followed by a 10-week CATI phase. After several weeks the Web survey returns indicated a lower than expected response rate. In an effort to improve the response, the schedule was revised to extend the Web data collection period for an additional 3 weeks for a total of 9 weeks before starting CATI. As a result, the CATI data collection began on August 25, 2016. It was planned to last 10 weeks and end on November 3, 2016, but during the CATI data collection period, a second decision extended the CATI field period an additional 3.5 weeks to end on November 27, 2016.

The data collection strategy included a progressive incentive scheme that would increase the incentive amount towards the end of the field period. The progressive incentive plan would allow us to target certain groups as required, based on differing response rates. In addition to a planned \$2 pre-incentive, the initial data collection strategy included starting with a \$5 promised incentive through the start of the CATI phase of data collection and increasing it to \$20 during CATI.

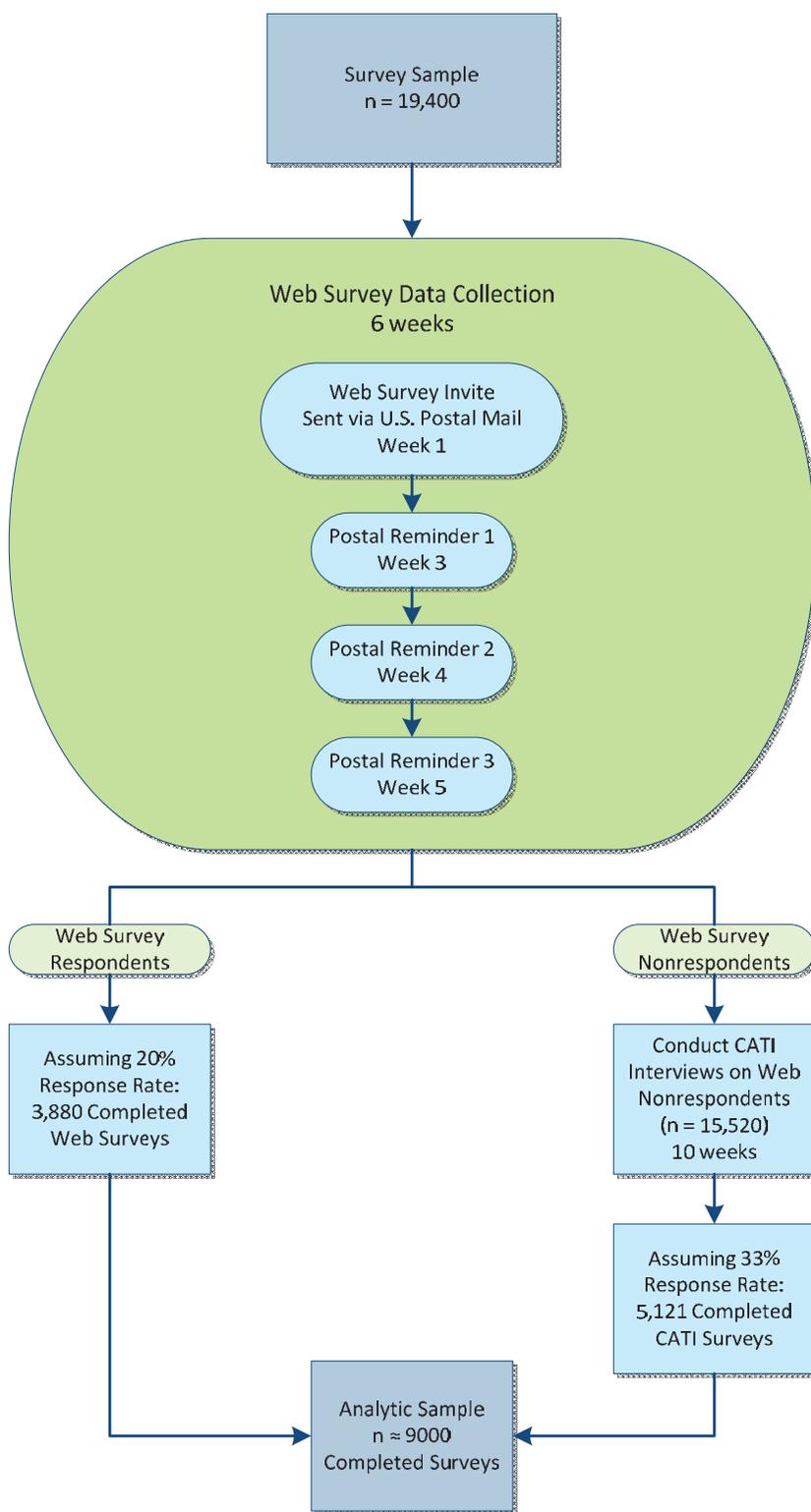


FIGURE 5-2 Data collection plan as originally designed.

TABLE 5-2 Timeline of Actual Data Collection Activities

Activity	Date
Sample drawn	5/10/16
Web Survey invitation letter mailed with \$2 pre-incentive	6/22/16
Reminder Letter #1 mailed	7/6/16
Reminder Letter #2 mailed	7/13/16
Non-response calls conducted	7/25/16–7/29/16
Reminder Letter #3 mailed	7/27/16
Interactive Voice Response (IVR) reminder calls conducted	8/9/16–8/13/16
CATI begins	8/25/16
Reminder Letter #4 mailed to Stratum 1	10/14/16
Reminder Letter #4 mailed to remainder of Stratum 1	11/4/16
Data collection ends	11/27/16

Data Collection

Data collection for the OEF/OIF/OND Veterans' Access to Health Services Survey began on June 22, 2016, when the invitation letter was mailed and ended on November 27, 2016, when the last CATI call was made. In total, 19,400 veterans were sampled and invited to participate in the study by completing either a Web survey or CATI interview. Table 5-2 presents a timeline of the major data collection milestones.

Final Survey Dispositions and Response Rate

Table 5-3 shows the final dispositions/result codes for all 19,400 sampled veterans at the completion of data collection. There were 3,061 Web surveys submitted as complete and 998 CATI interviews completed during data collection. Together, there were 4,059 surveys completed. Table 5-4 provides the final counts and percentages of sample cases by user and need status.

TABLE 5-3 Final Survey Status at End of Data Collection

Result Code	Final Status
Web survey completes	3,061
CATI complete	998
Web survey started, not submitted	181
Deceased	38
Final Refusal	13
Incapacitated/Sick/Not available in field period	5
Ineligible – Not a veteran/Never in the Service	15
Ineligible – Separated/Retired before 1/1/2002	22
Ineligible – Still on active duty	16
PND (Postal Non-Deliverable)	2,744
PND with new address	62
No response	12,245
Total Sample	19,400
Total Completes*	4,059
Return Rate	20.9%

*Web survey submits are included in the completes, although they may be determined later as not meeting a completeness rule.

TABLE 5-4 Final Survey Completes, by User and Need Status

Analytic Group	Actual Number of Completes		Expected Number of Completes	
	#	%	#	%
User of VA MH Services	832	20.5%	2,200	24.7%
Need for Services (Positive Screen)	788	19.4%	2,000	22.5%
No Need for Services (Negative Screen)	44	1.1%	200	2.2%
Non-user of VA MH Services	3,227	79.5%	6,700	75.3%
Need for Services (Positive Screen)	1,256	30.9%	2,000	22.5%
No Need for Services (Negative Screen)	1,971	48.6%	4,700	52.8%
Total Number of Completed Surveys	4,059	–	8,900	–

The final response rate for the survey, based on the American Association of Public Opinion Research (AAPOR) response rate definitions (specifically AAPOR RR2) is the number of completed interviews divided by the total number of eligible respondents. The eligible respondents are defined as the veterans in the sample file who are presumed to be alive. During the course of the data collection, it was learned that 38 sample members were deceased, and the number of deceased sample members was subtracted from the number of eligible sample members (denominator). Additionally, 53 veterans were determined to be ineligible during data collection and were also excluded from the eligible sample. Overall, the survey response rate was 22.0 percent, calculated as follows:

$$\begin{aligned}
 \text{Response Rate} &= (\text{number of completes} + \text{number of partial completes}) / (\text{number of total cases released} - [\text{number of deceased} + \text{number of ineligibles}]) * 100 \\
 &= [(4,059 + 181) / (19,400 - (38 + 53))] * 100 \\
 &= [4,240 / (19,400 - 91)] * 100 \\
 &= [4,240 / 19,309] * 100 \\
 &= \mathbf{22.0\%}^4
 \end{aligned}$$

The response rate is discussed in greater detail in the Study Limitations section later in this chapter.

Weighting

Analytic weights are needed for the production of statistically valid estimates and analyses of the survey responses. For the survey, a three-component weight was generated that reflected

- The selection probabilities of the sampled veterans by sampling stratum, called base weights;
- A non-response adjustment to account for the differential non-response that was observed across strata and demographic and other characteristics of veterans; and
- A final post-stratification adjustment to align the weighted totals from the sample to known distributions based on tabulations provided by the VA.

Base Weights

The base weight for a sampled veteran is simply the reciprocal of the probability of being selected into the sample. The base weight in this survey incorporated the two-phase sample design as discussed

⁴Of the 181 partial completes, 121 were ultimately considered complete cases (according the committee's criteria). Thus, 4,180 complete cases (4,059 + 121) were used in the final analysis.

earlier in this chapter. For the first phase of sampling, deployed veterans were selected at approximately a 1 in 3 rate, while non-deployed veterans were selected at approximately a 1 in 4 rate.

In the second phase of sampling, veterans were selected independently and at different rates within each of 13 strata formed as follows: First, non-deployed, non-users of VA mental health services formed one stratum. Second, deployed non-users of VA mental health services were stratified into four strata by cross-classifying their sex (2 levels: male or female) and age category (2 levels: <30, 30+). Finally, users of VA mental health services were stratified into eight strata by cross-classifying their deployment status (2 levels: yes or no), sex, and age category.

For purposes of increasing the precision of subpopulation estimates, female veterans, deployed veterans, and veterans who use VA mental health services were oversampled. Also, veterans younger than 30 were oversampled because it was expected that their response rate would be lower than that of older veterans.

The overall base weight of a given veteran was simply the product of the first-phase and second-phase base weights.

Non-Response Adjustment

A non-response adjustment was used to address the differing participation rates of different subgroups of veterans, some of whom were more likely to participate than others. The adjustment was developed to reduce the non-response bias of the survey estimates. A non-response analysis was conducted to identify the groups of veterans that exhibited different and disparate patterns of survey participation. An analysis called chi-square automatic interaction detector (CHAID) (Kass, 1980) was used to identify how veteran characteristics could be assembled to best explain the variation in survey participation. CHAID was used to identify 24 all-inclusive and mutually exclusive subgroups called “weighting cells” within which non-response weight adjustments were developed and applied to the constituent veterans. See Appendix A for more details.

The non-response adjustment calculation itself was straightforward. Within each weighting cell, the adjustment is the reciprocal of the weighted response rate of that cell using the base weights for the calculations. The magnitudes of the adjustment factor ranged from 2.32 to 6.19. The adjusted weights were calculated by multiplying the overall base weights of the survey respondents by the adjustment factor and by setting the adjusted weight of the non-respondents to zero.

Post-Stratification Adjustment

The final component of the analytic survey weight is a post-stratification adjustment. This adjustment aligns the weights of the sample respondents with known population distributions of veterans. Post-stratification can increase the statistical precision of survey estimates. An iterative proportional fitting method called “raking” (Kalton, 1983) was used to align the weighted sample of survey respondents—weighted by the base weight and non-response adjustment—to tabulations of veteran characteristics from the VA’s OEF/OIF/OND registry. Raking allows more distinct factors to be incorporated into the weighting adjustment process than otherwise would be achievable. Five raking cells were used that reflected a specific combination of sex, deployment status, and usage of VA mental health services during the previous 24 months. The raking cells were the four interior cells of Table 5-5 for deployed veterans plus a fifth cell that represented all non-deployed veterans. The raking factors ranged from 0.92 to 1.12. The final analytic weight for a “respondent” was its adjusted base weight multiplied by the combined non-response raking factor associated with the raking cell to which it had been assigned. The final analytic weight therefore incorporates three components—a base weight, a non-response adjustment, and a post-stratification adjustment. See Appendix A for more details.

TABLE 5-5 Five Raking Cells

Raking Cells	Deployed Veterans		Nondeployed Veterans
	Male*	Female	
Used mental health services in the last 24 months	x	x	
Did not use mental health services in the last 24 months	x	x	x

*Includes unknown/missing.

Defining the Need and User Groups

The analysis dichotomized all survey respondents into two need groups—those with a mental health need and those without a mental health need. A respondent was designated as having a mental health need if he or she either screened positive on at least one of the mental health screeners (described in the Questionnaire Design section above) (Q26–Q48) or reported receiving a mental health diagnosis from a health care professional in the previous 24 months (Q50).⁵

Based on their reported mental health service use, respondents were classified into user groups based on how they responded to survey questions about where—if at all—they had sought mental health services in the previous 24 months (Q22 and Q23). Users were classified as either VA users or non-VA users. VA users indicated that they had received mental health care from VA primary care, VA mental health specialty care, Vet Centers, or any combination of the above in the past 24 months (Q22); or else they indicated that they had used the VA for mental or behavioral health services (inpatient, outpatient, group therapy, psychotherapy, social skills training, or rehabilitation programs) in the previous 24 months (Q23). Respondents who indicated that they received mental health care only through non-VA providers (either paid for or not paid for by the VA) in the previous 24 months (Q22) were classified as non-VA users. Respondents who indicated that they had not used any mental health care services at the VA or elsewhere in the past 24 months were considered non-users for the purposes of this study.

SITE VISIT METHODS

Below, the methodology for the qualitative research (site visit) portion of the study is described. Multiple interviews were conducted in each of the VA's geographically divided networks, or Veterans Integrated Service Networks (VISNs), to obtain information from many interested parties, including VA staff (administrators and providers), staff at community-based organizations serving veterans, caregivers, and the veterans themselves—including those using and not using VA mental health services. The purpose of the interviews was to learn about the veterans' experiences and any barriers or issues with access or quality that they encountered when using VA mental health services. At the time of this study there were 21 VISNs.⁶

⁵It is possible that this definition generated a slight overestimate as it is plausible that some individuals who reported a diagnosis in the previous 24 months, but did not screen positive on any of the screeners, were not symptomatic at the time of the survey.

⁶The VISN were undergoing reorganization during the study period. The reorganization process is expected to be completed in 2018. Therefore, the VISN geographic coverage and numbers in this report may not correspond directly to the current VISN geographic coverage and numbers.

Site Visit Objective

The objective of the site visits was to identify the range of experiences surrounding OEF/OIF/OND veterans' access to VA mental health care services and the quality of those services. The site visits provided insights into how service providers and veterans themselves view both successes and problems with access to and the quality of VA mental health care services. The committee primarily used the site visit information to support and illustrate information from the committee's survey and from the literature. In a few cases, when no information was generated in the survey or was found in the literature but was generated from the site visits, the committee presents the site visit information exclusively. The committee was mindful that due to the nature of qualitative research, it is not appropriate to generalize information gathered from a small population sample to the broader veteran population.

Data Collection Protocols

Before conducting the site visits the committee and Westat staff developed standardized data collection instruments. The general areas of inquiry were access to and barriers to VA mental health care services, the quality of the services, and the availability of treatment choices. Interviewees were asked for their suggestions for how the VA could improve its mental health care services. The instruments included semi-structured interview guides for each type of respondent (that is, VA staff, community providers, and veterans who use and do not use VA mental health services), a template for recording on-site observations, and a self-assessment form used for background information to be completed at each site by a local VA staff member designated by the VA medical center (VAMC) director. With respondents' permission—and where feasible—all the data collected (from focus groups and in-depth interviews) were audio recorded, and the audio files were sent out for transcription. In instances where audio recording was not feasible (for example, ad hoc interviews, data collections conducted in loud environments such as restaurants, or when a participant asked not to be recorded or where no permission was given for recording), team members took notes. In addition, the research team developed a sheet of frequently asked questions (FAQs) to be handed out to interviewees during the site visits. Final versions of each site visit data collection instrument can be found in Appendix B of this report. A summary of the data collection modalities can be found in Table 5-6.

Staff Training

Westat's field staff received project-specific training on site visit research procedures and data collection protocols. An initial, half-day training was held at Westat's office in February 2015 and focused on two critical aspects of the study. First, the team reviewed the organization of service delivery within the VA, the geographic coverage provided by the VAMCs and their associated community-based outpatient clinics (CBOCs), and the mental health service offerings required of these different types of facilities. Second, the team reviewed the process of conducting an "environmental scan"—a comprehensive review of services available to OEF/OIF/OND veterans in the geographic area served by the target VAMC—which was one of the steps in ensuring the success of each site visit. Together, the staff worked through a practice scan using the protocol and reviewed the contact sheet to be completed for each site visit.

A second, full day of training took place at Westat's office in March 2015, which was also attended by the National Academies project staff. The goal of this training was to review the data collection procedures. This training included a discussion of the procedures for scheduling interviews, a review of all interview guides and other data collection protocols, data collection procedures, and a review of the National Academies' site visit report template developed by the committee. In addition, the staff reviewed and discussed the protocol to follow in the event an interview participant became distressed.

TABLE 5-6 Site Visit Data Collection Modality and Location by Respondent Type

Respondent Type	Data Collection Method ^a				Location of Data Collection	
	In-Depth Interview	Focus Group	Self-Assessment Questionnaire	Environmental Scan Observation	At VA Facility	Off-Site
VAMC Leadership/Administrators	X	X	X		X	
VAMC Behavioral Health Leadership		X			X	
VAMC Behavioral Health Line Staff ^b		X			X	
VAMC OEF/OIF/OND Transition Team		X			X	
CBOC Behavioral Health Staff	X	X			X	
Vet Center Staff	X	X			X	
Community Mental Health Providers	X	X				X
Veterans:						
Currently Using VA Mental Health Services	X	X			X	X
Veterans:						
Not Currently Using VA Mental Health Services	X	X				X
Site Visit Field Staff				X	X	X

NOTES: CBOC = community-based outpatient clinic; OEF/OIF/OND = Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn; VAMC = VA medical center; VA = Department of Veterans Affairs.

^aData collection methods are a comprehensive snapshot across all sites.

^bIncludes primary care–mental health integration (PC-MHI) team members, women’s clinic staff, PTSD clinic staff, directors of telehealth services, and peer support staff, among others.

The discussion included how to distinguish momentary distress from a psychiatric crisis, what steps to take to ensure the immediate safety of interview participants and staff, and the reporting requirements in the event of a psychiatric emergency. Westat staff assignments were made for each of the 21 sites, and provisional travel dates were established.

National Academies committee members and staff and Westat staff who attended the site visits were required to complete the VA’s Privacy and Health Insurance Portability and Accountability Act Focused Training and Privacy and Information Security Awareness and Rules of Behavior courses as well as Westat’s Human Subjects Protection Training course.

Site Selection

The principal goal of the site selection was to capture the heterogeneity of mental health care experiences from the perspectives of VA staff, local communities, caregivers, and, most importantly, from the OEF/OIF/OND veterans themselves. To this end, the site-selection criteria included the number of OEF/OIF/OND veterans served by each VAMC and its associated CBOCs; the geographic location of the site (for example, rural or urban); the demographic characteristics of the location (for example, locations with substantial minority populations); and, in some instances, the unique characteristics of the VAMC (for example, strong research participation, VAMCs affiliated with universities, and having a polytrauma clinic on site) that might offer insights into promising mental health treatment approaches for this cohort of veterans. Table 5-7 lists the sites that were subjectively selected by the committee and the dates when site visits were conducted. Figure 5-3 shows a map of the site visit locations.

TABLE 5-7 Sites and Dates of Site Visits (in Order by VISN Number)

VISN #	Site/VAMC Name	Site Visit Dates (2015)
1	VA Connecticut Health Care System West Haven, CT	July 26–30
2	Syracuse VA Medical Center Syracuse, NY	July 19–23
3	New Jersey Health Care Center East Orange, NJ	Nov 16–20
4	Altoona VA Medical Center Altoona, PA	May 10–14
5	Washington, DC VA Medical Center Washington, DC	June 15–19
6	Hampton VA Medical Center Hampton, VA	Nov 2–5
7	Ralph H. Johnson VA Medical Center Charleston, SC	May 3–7
8	James A. Haley Veterans' Hospital & Clinics Tampa, FL	March 16–19
9	Tennessee Valley VA Healthcare System Nashville, TN	March 30–April 3
10	Louis Stokes Cleveland VA Medical Center Cleveland, OH	June 21–26
11	Battle Creek VA Medical Center Battle Creek, MI	July 19–24
12	Jesse Brown VA Medical Center Chicago, IL	October 12–16
15	VA Eastern Kansas Health Care System Topeka, KS	September 13–17
16	Gulf Coast Veterans Health Care System Biloxi, MS	September 20–24
17	Olin E. Teague Veterans' Medical Center Temple, TX	November 2–6
18	El Paso VA Health Care System El Paso, TX	March 16–19
19	VA Eastern Colorado Health Care System Denver, CO	July 26–31
20	VA Puget Sound Health Care System Seattle, WA	June 21–26
21	VA Palo Alto Health Care System Palo Alto, CA	June 15–20
22	VA San Diego Healthcare System San Diego, CA	March 23–28
23	Iowa City VA Health Care System (pilot site visit) Iowa City, IA	February 9–13

NOTE: VA = Department of Veterans Affairs; VAMC = VA medical center; VISN = Veterans Integrated Service Network.

Site Visit Planning

Planning each site visit consisted of two major activities. First, Westat staff worked with site-specific points of contact to schedule the first day of interviews at the VAMC. Each visit began with a briefing of medical center leadership, followed by (in no set order) focus groups with the behavioral health

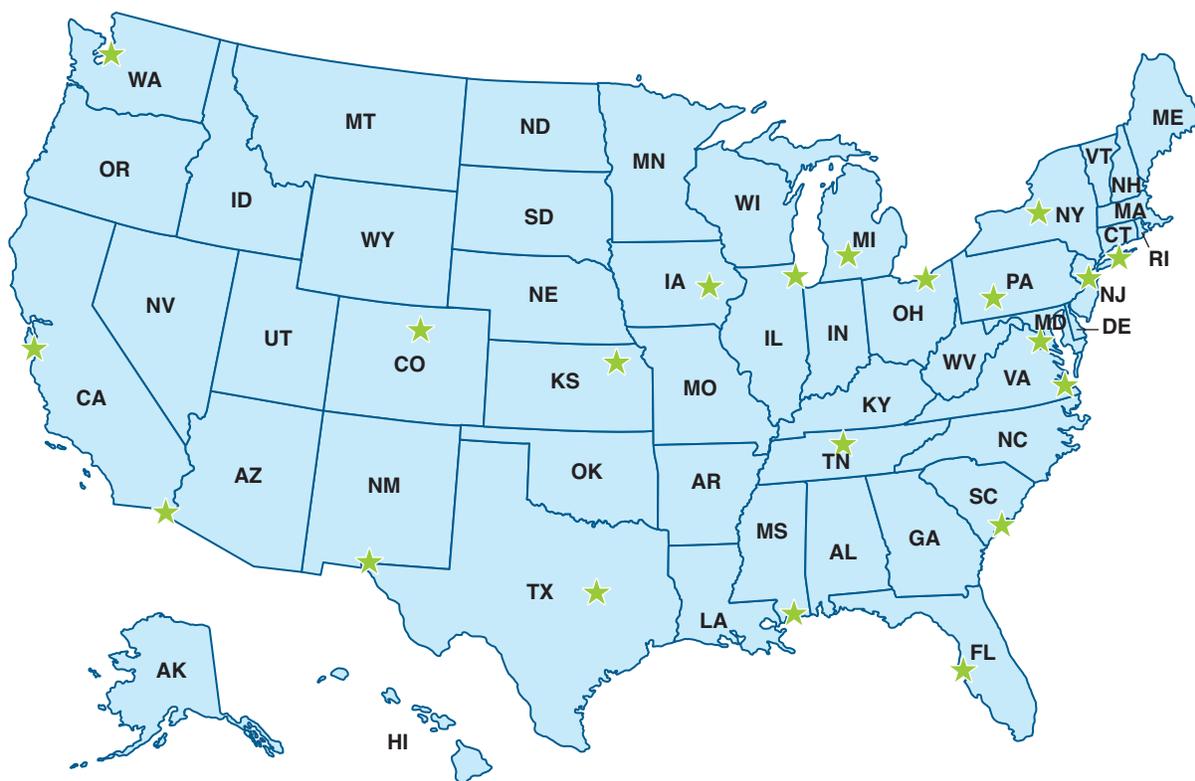


FIGURE 5-3 Map showing approximate Department of Veterans Affairs medical center location for each site visit.

leadership team, with the behavioral health line staff, with the OEF/OIF/OND transition team, and with veterans who were currently using VA mental health services. Additional interviews, arranged as time allowed, included discussions with the primary care–mental health integration team members, women’s clinic staff, PTSD clinic staff, directors of telehealth services, and peer support staff, among others.

The next planning activity was the environmental scan, a comprehensive review of services available to OEF/OIF/OND veterans in the geographic area served by the target VAMC. Each scan sought to gain an understanding of the full range of VA-related services in the area (for example, CBOCs and Vet Centers) and of community-based organizations that might be working with large numbers of this cohort of veterans. Such organizations included 2- and 4-year colleges and universities, technical colleges, veterans service organizations (for example, VFW and Team Red, White, and Blue), and grassroots peer-support networks. They also included providers of mental health, wellness, and other services, including community mental health providers, organizations committed to health and wellness activities (for example, mindfulness training, yoga, sports and recreational activities), and veterans’ interest groups (for example, Combat Veterans Motorcycle Association chapters).

Site visit team members reached out to these organizations’ leaders to learn if the services being offered were germane to the study and, if so, to see if the team could interview both staff and OEF/OIF/OND veterans and their caregivers during the site visit. Through these activities, the teams ultimately developed site visit schedules that ensured a broad representation of service providers (for example, VAMC, CBOC, Vet Center, and community-based) and included the voices of as many veterans as pos-

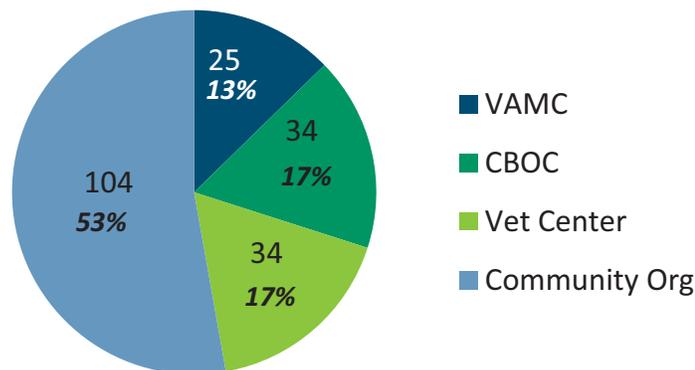


FIGURE 5-4 Number and percentage of interviews and group discussions by venue.

sible. The schedules also included open times during which team members could follow up on information obtained while on-site and conduct ad hoc interviews. As an added level of oversight, members of the committee and National Academies staff participated in some of the site visits, although Westat staff conducted the interviews.

For each of the 21 selected sites, National Academies' staff sent the director of the VAMC a letter informing him or her of the purpose, details, and timing of the site visit and requesting that a point of contact be assigned to help the site visit team coordinate and schedule staff interviews at the VAMC. Accompanying the letter was an optional self-assessment form that was to be completed by the director's designee and returned to the site visit team 1 week prior to the start of the visit. Nineteen self-assessment forms were completed and returned. Because Vet Centers operate under a separate administrative structure, a similar letter (but not the self-assessment form) was sent to the readjustment counseling services regional director in advance of each visit.

Data Collection

Across the 21 site visits, approximately 336 in-person, on-site, one-on-one interviews and focus groups at nearly 200 different locations (see Figure 5-4) were conducted.⁷ In each location staff began the site visit at the VAMC and spent the entire first day conducting interviews or focus groups with facility administrators, clinical staff, and veterans.⁸ Visits to local CBOCs generally involved interviews only with clinic staff, although in a few instances the staff had arranged for a small number of veterans to meet with the site visit team. The largest number of veteran interviews and focus groups was conducted at Vet Centers and community-based organizations. These organizations played a critical role in ensuring that the study included the voices of veterans, sometimes recruiting several groups of veterans, including those who were not using VA mental health services. This method resulted in a convenience sample comprising people who volunteered to speak with the interviewers and who were available during the time of the visit. The sample is not representative of the larger OEF/OIF/OND veteran population.

⁷This number is based on the number of interview transcripts and typed notes that the analysis team reviewed for this report. This number does not include ad hoc interviews that were not audio recorded and notes or information garnered from calls made for the environmental scans.

⁸Several locations had more than one VAMC. In four of these sites, staff at the second VAMC were included in the first-day interviews by video or telephone conference, or team members interviewed these staff separately on a different day of the visit.

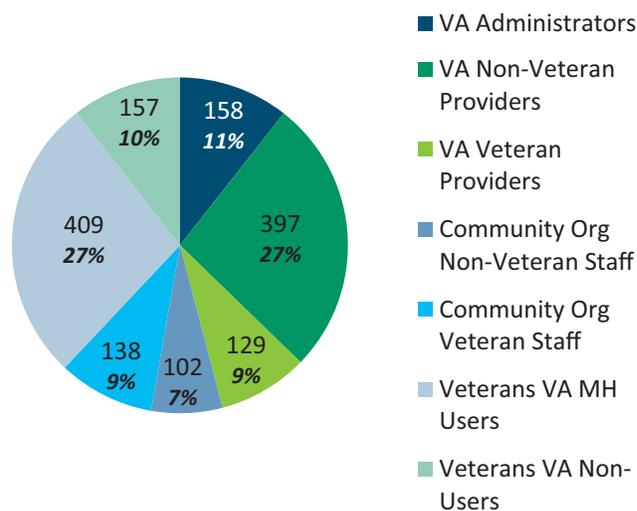


FIGURE 5-5 Number and percentage of participants by type.

Figure 5-5 provides details about the numbers and types of interviewees. Of the nearly 1,500 study participants, just under half (684) were employed at either a VAMC or CBOC. Among the more than 500 VA providers interviewed, about one-quarter self-identified as military veterans. Teams also interviewed 240 individuals working with community-based service providers or organizations, including private-sector mental health providers; staff leading student veterans associations on college campuses; staff working in organizations dedicated to veteran social, emotional, and physical wellness; and Vet Center staff.⁹ Overall, nearly 60 percent of these participants said they were veterans.

The team also gathered information from more than 550 non-provider OEF/OIF/OND veterans¹⁰ and a small number of veterans from other eras¹¹ about their experiences with and views on VA mental health services (the participants were identified through the environmental scan). When veterans from other eras participated, it was often in instances where the VA staff or other points of contact identified them as the only volunteers who were willing to be interviewed or when they were part of a therapy group that integrated veterans from more than one era and the group as a whole agreed to participate.

Field staff observed that approximately 40 percent of veteran participants were racial or ethnic minorities, and just under 20 percent were women. Figure 5-6 shows the branch of service for the ap-

⁹Vet Centers receive their funding from the Department of Veterans Affairs but do not share patient records with the VA unless they have explicit permission from the patient. Vet Centers provide free counseling services to all combat veterans, including many who are not eligible for VA services. For example, Vet Center counselors can provide services to active-duty service members.

¹⁰Caregivers have been included in the total for veterans interviewed by the site visit teams. In some cases, the caregiver (almost always a spouse) accompanied the veteran; in others, data collection was conducted with just the caregiver. In the 13 site visits where caregivers were counted separately from veterans (that is, the category was not OEF/OIF/OND Veterans or Caregivers–VA Service Users/Non-Users), they totaled only 12. Thus, the vast majority of “veteran participants” were, indeed, the veterans themselves.

¹¹All study materials and requests for veteran participants specified that the study was focused on the cohort of OEF/OIF/OND veterans. However, in some cases, veterans from other eras participated in the discussions. Their numbers are not included in any of the participant totals.

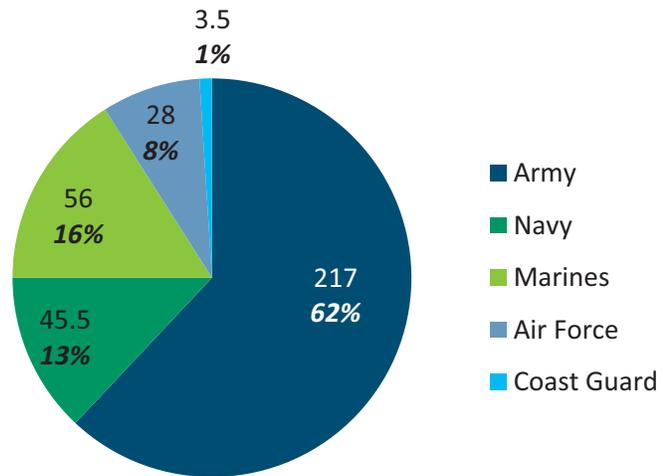


FIGURE 5-6 Number and percentage of veteran participants by service branch.

proximately 350 veterans who reported this information during audio-recorded interviews; the majority were from the Army. Approximately three-quarters of the veteran participants reported that they were either currently receiving mental health services through the VA or had done so at sometime within the past 2 years. The remaining veterans were classified by study team members as non-users of VA mental health services; that is, they either had never accessed VA mental health services, or had done so but not within the past 24 months (although they may have been accessing counseling services through the Vet Centers). Individuals so categorized included

- Veterans who had TRICARE or commercial health insurance through their employers and were using services in the private sector;
- Veterans who did not perceive themselves as having a need for any mental health services, regardless of the service location;
- Veterans who did have a perceived need for mental health services, but were reluctant to seek assistance through the VA; and
- Veterans who had previously received services at the VA, but who had stopped using those services.

After reviewing a few of the early site visits, the committee suggested that the site visit team attempt to increase representation of the non-users in the study by reaching out to locations serving extremely low-income veterans, such as food banks and homeless shelters. However, veterans served in these locations appear to be well connected with the VA for two important reasons. First, these individuals often have no other health insurance, and if they are not using the VA for care, they are consuming county or state resources for indigent populations. It is thus in the locality's fiscal interest to get the veteran connected with federally funded VA services as quickly as possible. Second, the VA has seen a large influx of resources (for example, vouchers for housing and services) as a result of the 2009 federal government mandate to end veteran homelessness. Outreach workers are aware that while overall funding for homeless populations may be limited, there is a pool of resources at the VA that can facilitate veterans' transition to stable housing, and thus they are quick to make the appropriate referrals.

Data Analysis

The qualitative data analysis used 336 transcripts or typed notes, most of which were drawn from focus group data collections. These documents were uploaded into an NVivo 10 database (a computer software tool used for qualitative analysis) for review and coding. The key characteristics of the interviews and respondents, such as whether they were staff or veterans or VA mental health service users, and the interview locations (for example, VISN number, type of facility or organization in which the interview took place) were linked to the documents so that the data could be examined for varying themes between the different types of respondents.

After an initial review of the data, Westat's analytic team worked together to develop a provisional coding structure. High-level or "parent codes" generally reflected key research questions (for example, questions concerning access and barriers to care). Subcodes tended to reflect findings that had been discussed frequently during team meetings (for example, specific barriers, such as childcare, stigma, and military expectations). As the analytic team reviewed and coded their assigned documents, they conferred on needed refinements to the coding structure, and new codes were added when needed to reflect unanticipated ideas or new theoretical insights.

LITERATURE REVIEW METHODS

The committee identified and reviewed numerous sources of existing literature to provide the support and background information that is present throughout the other chapters in this report. Relevant studies in the peer-reviewed literature, applicable VA (and other government agency) reports, Internet resources, congressional testimony, private-sector reports, recent relevant National Academies reports, and some grey literature were reviewed and considered. The committee also heard presentations from VA officials and other subject-matter experts. The National Academies staff, in consultation with the committee, completed extensive literature searches at the beginning of the study (April 2014) and yearly thereafter (January 2015, January 2016, and January 2017). Databases searched included Pubmed, Ovid Medline, and PsycInfo. Additionally, NCIS, the Cochrane Database of Systematic Reviews, RAND, the VA Office of Inspector General, the Government Accountability Office, and the Congressional Research Service were searched for relevant titles. Searches were limited to studies published in English since October 2001. Search terms used were broad: veterans AND (mental health OR behavioral health OR psychological health). After each search, the committee members, with the assistance of National Academies' study staff, reviewed the abstracts to determine which studies from the literature should be included in this evaluation. Additional targeted topical searches were completed during the study. In total, approximately 8,500 abstracts were reviewed, of which approximately 3,000 full text articles and reports were selected for consideration. Throughout the study, the committee requested and received additional information from the VA. The information submitted by the VA can be accessed at <http://www8.nationalacademies.org/cp/projectview.aspx?key=49582> (accessed January 3, 2018).

STUDY LIMITATIONS

As described above, the committee used three major types of sources to gather data for this study: conducting a survey of veterans who use and do not use VA mental health services; conducting multiple site visits around the nation to talk with veterans, their families and caregivers, and mental health providers about VA's mental health services; and conducting a review of literature that is relevant to the study task. By using this three-pronged strategy, the committee was able to collect a large amount of information with which to address its task. It is important to note, however, that each data source (the

survey, the site visits, and the literature review) has its own limitations, which are discussed below. An overall limitation of the study is that during the 4 years that the committee was collecting information and evaluating the VA's mental health services, the VA was making changes to its services. To obtain the most up-to-date information possible, the committee made numerous requests to the VA, and the VA provided the updated information. The committee, however, acknowledges that additional changes to VA's mental health services may have occurred prior to publication of this report and are not captured in it.

The accuracy and precision of the survey findings presented in this report may be limited by the major sources of errors that potentially affect all population-based survey data collections. The potential errors include errors caused by coverage biases in the sample frame, errors caused by sampling variation in the observed data, errors caused by selective bias due to survey noncontact or noncooperation, and measurement errors of the sort that can appear when one is dealing with complex constructs such as mental health symptoms measures and the nature and severity of mental health risk factors. With the assistance of the VA, Westat survey statisticians were able to acquire a comprehensive sample frame for the study and to design and implement an efficient two-phase stratified random sample of the target populations of deployed and non-deployed veterans. However, the substantial rates of noncontact and nonresponse during the survey data collection affected the precision of the estimates and potentially even the inherent representativeness of the sample of veterans who were ultimately interviewed for the survey. Chapter 6 discusses the estimates of demographic and military characteristics derived from the committee's survey (see Tables 6-1 and 6-2) compared with estimates produced by the VA for the post-9/11 veteran population.

Despite rigorous protocols for tracing and contacting the selected probability sample of veterans, the final combined AAPOR RR2 response rate for the survey was 22.0 percent—roughly half that anticipated at the time the survey was designed. The shortfall in the anticipated response rate may be attributed in part to the fact that the first- and second-phase sample frame provided to Westat did not include mailing address, telephone number, or e-mail address contact information for the individual veterans. The contact information needed to send the survey request to the sampled veterans was obtained by linking to address and telephone number information available for the general population from a commercial source. Other possible explanations for not achieving the targeted response rate include veteran privacy and confidentiality concerns and low saliency of the survey topic for veterans who do not experience mental health symptoms or use VA services for physical or mental health care. The lower-than-expected response rate resulted in a final observed sample size of $n = 4,059$ cases as compared to the expected sample yield of $n = 8,900$ completed interviews. Relative to the precision of estimates expected at the design stage of the survey, this translated to roughly a 50 percent increase in the size of the standard errors for descriptive estimates for the total veteran population and its major subclasses.

As detailed in Appendix A, the response rate for sample veterans who were never deployed to Iraq or Afghanistan was 17 percent (AAPOR RR3). Since the stratum of non-deployed, non-VA users comprised 7,855 cases in the original study sample of 19,200 veterans, the impact of this group of sample veterans on the final overall response rate was substantial. Furthermore, as mentioned above, the VA-supplied frame for the veterans included no information on demographic or service characteristics, further reducing the capability to use such population controls in the development of non-response and post-stratification adjustments. Final AAPOR RR3 response rates for the sample strata that included VA users and non-users who had deployed to Iraq or Afghanistan ranged from 17 to 32 percent. Survey response rates were lowest for the stratum of non-deployed veterans and also for deployed veterans who were younger in age and lower in rank at separation from service.

Weighting adjustments for non-response and post-stratification were developed to compensate for differential response by sample veterans belonging to different demographic, service characteristics, and VA-user status groups. The analysis of non-response bias is summarized in Appendix A and demonstrates that for these major factors, the compensatory weighting attenuates much of the bias observed when comparing weighted estimates to the information available for the population on the sample frame. Additional analysis for veterans who are known users of VA services suggests that the weighting of the sample respondent data attenuates major differences on frequency and type of service use for the total eligible population of veterans who use these services. Despite these encouraging results from the nonresponse analysis, due to the low response rate for the survey the potential for non-response bias in survey results for different subpopulations and different variables remains a caution to note in the overall interpretation of study findings.

Key survey measures that form the basis for the many statistical summaries presented in this report are potentially susceptible to various forms of measurement error, including the potential for recall bias and the “telescoping” of time frames in their survey reports. There is also the possibility that the survey scales that aim to capture complex constructs such as mental health symptomatology, the use of services, or experience in combat or with traumatic events may in some cases have misclassified the true states or risk factor exposures of the individual veterans. Throughout the process of developing the survey questionnaire and selecting the items to include in the survey, great care was taken by the committee and the Westat team to rely on validated scales and measures or to use question items that had been previously used in other surveys of veterans and the general population. Cognitive interviewing and pretesting with a small number of veteran volunteers during the questionnaire development process further served to identify and correct major problems with the measures prior to the actual fielding of the final survey instrument.

The 21 site visits conducted as part of the data-gathering efforts for this study provided the committee with valuable qualitative information on OEF/OIF/OND veterans’ experiences regarding access to VA mental health care services and the quality of those services. The number of participants interviewed over the course of the site visits was large (nearly 1,500 people were interviewed) and diverse. The interviewees included women and men, racial and ethnic minorities, and veterans from all service branches. There were several limitations to the site visits. The interviewees represent a self-selected sample; in other words, people often opted to speak with the site visitors for a specific reason (for example, a negative experience using VA mental health care services). Due to time and cost constraints, it was not feasible to conduct follow-up interviews or to do multiple in-depth interviews with participants. For the same reasons, each site visit was limited to about 4 days and, therefore, not all potential sites and interviewees within each VISN could be visited. In some cases, because of scheduling conflicts not all potential interviewees could participate in the site visits. The recruitment of interviewees often relied on contact persons in each locale who were willing to assist the site visitors, and the level of assistance varied from site to site. Therefore, in some locations, recruiting interviewees was challenging. Finally, it is possible that some potential interviewees may not have participated because they did not want to criticize the VA, or some who did participate may not have felt comfortable making negative statements about the VA during group discussions.

Literature searches were conducted near the beginning of this study (early in 2014) and annually thereafter. Studies on the VA’s mental health services and other relevant articles are published by researchers on an ongoing basis, and it is possible that relevant studies published after the committee’s final literature search have not been captured in this report.

REFERENCES

- Kalton, G. 1983. *Compensating for missing survey data*. Survey Research Center, Institute for Social Research, University of Michigan.
- Kass, G. V. 1980. An exploratory technique for investigating large quantities of categorical data. *Applied Statistics* 29(2): 119–127.
- King, L. A., D. W. King, D. S. Vogt, J. Knight, and R. E. Samper. 2006. Deployment risk and resilience inventory: A collection of measures for studying deployment-related experiences of military personnel and veterans. *Military Psychology* 18(2):89–120.
- Vogt, D., B. N. Smith, L. A. King, D. W. King, J. Knight, and J. J. Vasterling. 2013. Deployment Risk and Resilience Inventory-2 (DRRI-2): An updated tool for assessing psychosocial risk and resilience factors among service members and veterans. *Journal of Traumatic Stress* 26(6):710–717.

6

Department of Veterans Affairs Mental Health Services: Need, Usage, and Access and Barriers to Care

Since Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) began in 2001, 2003, and 2010, respectively, an increasing number of veterans from this era have been receiving health care services through the Department of Veterans Affairs (VA). These services have included care to address mental health conditions that developed following their military service (Mott et al., 2014; VA, 2014). The purpose of this chapter is to detail the characteristics of the OIF, OEF, and OND veteran population, describe the mental health needs that exist within this population, and explore how these veterans are using mental health services, including treatment provided by the VA and other non-VA sources of care. To address a key task in the committee's charge, this chapter relies on its own survey to examine in depth the mental health service needs and treatment patterns for OIF, OEF, and OND veterans who are not currently enrolled to receive mental health services at a VA facility. The committee examines survey and site visit findings on the experience of veterans with VA mental health services, barriers to accessing these services, current attitudes toward VA mental health services, and the factors influencing veterans' future use of these services. The chapter concludes with a summary and the committee's conclusions regarding the use of VA mental health services.

The specific questions addressed in the major sections of this chapter are

- How is eligibility for and access to VA health services, including mental health services, determined?
- What are the key demographic, service-related, and geographic characteristics of the 2016 pool of approximately 4.1 million OEF/OIF/OND-era veterans?
- What is the need for mental health services among OEF/OIF/OND-era veterans?
- What share of those veterans in need are accessing mental health treatment services and where are those in treatment receiving services?

- Among veterans who have used the VA mental health services, what are their experiences with respect to various dimensions of access and quality, such as the availability, timeliness, and effectiveness of the care they received?
- Among those in need, what are the barriers and facilitators to use of mental health services?
- What factors may influence the future use of mental health services?

ELIGIBILITY AND PRIORITY FOR DEPARTMENT OF VETERANS AFFAIRS HEALTH CARE SERVICES

The VA serves 8.76 million veterans per year at more than 1,700 health care sites throughout the United States (VA, 2015e). Not all veterans, however, are eligible for care through the VA. Veterans may be eligible for health care services if they

- Served in the active military service and were separated under any condition other than dishonorable.
- Served in the Reserves or National Guard, or are currently serving, and were called to active duty by a federal order and completed the full period for which they were called or ordered to active duty (VA, 2015c).

The VA has minimum duty requirements for eligibility for health care services. For example, most veterans who enlisted after September 7, 1980, or entered active duty after October 16, 1981, must have served 24 continuous months or the full period for which they were called to active duty in order to be eligible (VA, 2015c). A number of exceptions to the minimum duty requirements exist and, therefore, veterans must apply for health care services to determine eligibility. An enhanced eligibility status exists for any veteran who falls into one or more of the following categories:

- Is a former prisoner of war.
- Has received the Purple Heart medal.
- Has received the Medal of Honor.
- Has a compensable VA awarded service-connected disability of 10 percent or more.
- Receives a VA pension.
- Was discharged from the military because of a disability (not pre-existing), early out, or hardship.
- Served in a theater of operations for 5 years post discharge.
- Served in the Republic of Vietnam from January 9, 1962 to May 7, 1975 (or on qualifying U.S. Navy and Coast Guard ships associated with military service in Vietnam).
- Served in the Persian Gulf from August 2, 1990, to November 11, 1998.
- Was stationed or resided at Camp Lejeune for 30 days or more between August 1, 1953 and December 31, 1987.
- Is found by VA to be catastrophically disabled.
- Previous years' household income was below VA's National Income or Geographical-Adjusted Thresholds (VA, 2015c).

Veterans must apply for VA health care services, and then the VA reviews the application and makes a determination on eligibility for enrollment. Once a veteran is enrolled, the veteran is assigned an enrollment priority group (see Box 6-1). Priority groups are used because Congress annually allocates funds for VA and, given the limited funds it must work with, the agency needs a way to prioritize who should receive health care services. The priority groups range from 1 to 8, with those in group 1 receiving the highest priority. On the basis of eligibility and income, some veterans may have to pay a copay when using services.

Veterans who served in a combat theater after November 11, 1998, and were discharged from active duty on or after January 28, 2003, are eligible for comprehensive VA health care services for 5 years following their discharge under the “combat veteran” authority in the National Defense Authorization Act of 2008. Veterans in this group would include veterans serving in combat theaters in support of OEF/OIF/OND (unless they were discharged before January 28, 2003). During the 5 years, veterans are allowed to enroll for health care services without first establishing their priority group. After 5 years, these veterans are assigned to a priority group based on their income and degree of disability due to their service-related condition at that time (IOM, 2014). Combat veterans who did not enroll within the 5-year window of eligibility and were discharged from service between January 1, 2009, and January 1, 2011, were granted 1 additional year of eligibility under the Clay Hunt Suicide Prevention for American Veterans Act in 2015.¹

In general, the VA does not provide health care services or coverage to spouses or dependents. However, with the Program of Comprehensive Assistance for Family Caregivers, veterans’ family members caring for seriously injured veterans, including veterans who have mental health conditions, are eligible for certain VA services including caregiver training, a financial stipend, mental health services and counseling, and access to health insurance (VA, 2017f).

Legal veteran status is earned by individuals who complete at least 2 consecutive years of active-duty military service and are discharged or separate from service under conditions other than dishonorable.² Under VA regulations (although not mandated by federal law), individuals who receive an other-than-honorable (OTH) discharge are not eligible to receive VA medical care, including mental health care (Commission on Care, 2016). This includes veterans who received an OTH discharge because of actions or behavior that resulted from a health condition (such as a traumatic brain injury [TBI], posttraumatic stress disorder [PTSD], or substance use) that may have been caused or aggravated by their service. Individuals with OTH discharges have some level of misconduct on their records, but no court martial convictions. Nearly 7 percent of OEF/OIF/OND veterans have received an OTH discharge (Swords to Plowshares, 2016). A recent Government Accountability Office report (GAO, 2017) found that of the 91,764 service members who received a misconduct separation between fiscal years (FY) 2011 and 2015, 62 percent (57,141) were diagnosed with PTSD or a TBI within 2 years of their separation. Of the 57,141, 23 percent (12,283) received an OTH discharge, making them potentially ineligible to receive VA health care services. This finding is consistent with findings of a 2016 report by the congressionally appointed Commission on Care, which reported that many former service members who received an OTH discharge as a result of a regulatory bar (which could be the result of behavioral misconduct related to a service-connected mental health condition) are legally veterans, but are routinely denied health care unless they request, receive, and prevail in eligibility adjudication with the Veterans Benefits Administration (VBA) that their discharge was not dishonorable (Commission on Care, 2016). However, very few veterans who request eligibility adjudication receive it. For those veterans who are granted adjudication proceedings, the process can take about 4 years to complete (Swords to Plowshares, 2016). The Commission on Care recommends that the VA eliminate the regulation that automatically prohibits veterans with an OTH discharge from receiving health care from the VA. Furthermore, it recommends that the VA award tentative eligibility for services to individuals with OTH discharge who have completed substantial honorable service, including (but not limited to) serving in a combat theater. Finally, it recommends that the VA should provide an opportunity to recognize that misconduct that leads to the OTH discharge may itself be related to a service-connected condition (Commission on Care, 2016). As mentioned in Chapter 4,

¹Public Law 114-2.

²38 U.S.C. § 101(2).

BOX 6-1
Department of Veterans Affairs Priority Groups

Priority Group 1

- Veterans with VA-rated service-connected disabilities 50 percent or more disabling
- Veterans determined by VA to be unemployable due to service-connected conditions

Priority Group 2

- Veterans with VA-rated service-connected disabilities 30 percent or 40 percent disabling

Priority Group 3

- Veterans who are former prisoners of war
- Veterans awarded a Purple Heart medal
- Veterans whose discharge was for a disability that was incurred or aggravated in the line of duty
- Veterans with VA-rated service-connected disabilities 10 percent or 20 percent disabling
- Veterans awarded special eligibility classification under Title 38, U.S.C., § 1151, “benefits for individuals disabled by treatment or vocational rehabilitation”
- Veterans awarded the Medal Of Honor

Priority Group 4

- Veterans who are receiving aid and attendance or housebound benefits from VA
- Veterans who have been determined by VA to be catastrophically disabled

Priority Group 5

- Nonservice-connected veterans and noncompensable service-connected veterans rated 0 percent disabled by VA with annual income below the VA’s and geographically (based on resident zip code) adjusted income limits.
- Veterans receiving VA pension benefits
- Veterans eligible for Medicaid programs

Priority Group 6

- Compensable 0 percent service-connected veterans
- Veterans exposed to ionizing radiation during atmospheric testing or during the occupation of Hiroshima and Nagasaki
- Project 112/SHAD participants
- Veterans who served in the Republic of Vietnam between January 9, 1962 and May 7, 1975
- Veterans of the Persian Gulf War who served between August 2, 1990 and November 11, 1998
- Veterans who served on active duty at Camp Lejeune for not fewer than 30 days beginning August 1, 1953 and ending December 31, 1987*
- Veterans who served in a theater of combat operations after November 11, 1998 as follows:

in 2017 VA Secretary David Shulkin announced that the VA would offer emergency mental health care to veterans with an OTH discharge status as part of its ongoing efforts to prevent veteran suicides (VA, 2017e). Under this initiative, veterans with OTH discharges will be eligible to seek treatment at a VA emergency department, Vet Center, or contact the Veterans Crisis Line. The VA will provide a full array of mental health services for up to 90 days. The VA estimated that 30,000 to 50,000 OTH veterans per year (out of the total 505,000) would use emergency mental health services, requiring an estimated

- Currently enrolled veterans and new enrollees who were discharged from active duty on or after January 28, 2003, are eligible for the enhanced benefits for 5 years post discharge.
- Combat veterans who were discharged between January 2009 and January 2011, and did not enroll in the VA health care during their 5 year period of eligibility have an additional one year to enroll and receive care. The additional 1 year eligibility period began February 12, 2015 with the signing of the Clay Hunt Suicide Prevention for America Veterans Act.

Priority Group 7

- Veterans with gross household income below the geographically-adjusted income limits (GMT) for their resident location and who agree to pay copays

Priority Group 8

- Veterans with gross household income above the VA and the geographically-adjusted income limits for their resident location and who agree to pay copays

Veterans eligible for enrollment

Noncompensable 0 percent service-connected:

- Subpriority a: Enrolled as of January 16, 2003, and who have remained enrolled since that date and/or placed in this sub priority due to changed eligibility status
- Subpriority b: Enrolled on or after June 15, 2009 whose income exceeds the current VA or geographic income limits by 10 percent or less

Nonservice-connected and

- Subpriority c: Enrolled as of January 16, 2003, and who have remained enrolled since that date and/or placed in this sub priority due to changed eligibility status
- Subpriority d: Enrolled on or after June 15, 2009 whose income exceeds the current VA or geographic income limits by 10 percent or less

Veterans not eligible for enrollment

Veterans not meeting the criteria above:

- Subpriority e: Noncompensable 0 percent service-connected (eligible for care of their SC condition only)
- Subpriority g: Nonservice-connected

NOTES: At the end of this enhanced enrollment priority group placement time period veterans will be assigned to the highest priority group their unique eligibility status at that time qualifies for.

*While eligible for priority group (PG) 6; until system changes are implemented you would be assigned to PG 7 or 8 depending on your income.

NOTE: Priority group 1 has the highest priority to receive services; priority group 8 has the lowest.

SOURCE: VA, 2015d.

150,000 to 240,000 additional bed days of inpatient care as well as approximately 375 to 675 full-time equivalent provider-years of outpatient mental health services (VA, 2017d).

In FY 2016, 9,040,675 veterans of all eras were enrolled in the VA health system and assigned to priority groups 1–8 (see Box 6-1).³ Of those, 1,024,330 are OEF/OIF/OND veterans (that is, veterans who served in the U.S. Armed Forces after September 2001), and 8,016,345 are veterans of other eras.

³Personal communication, Stacy Gavin, VA, May 25, 2017.

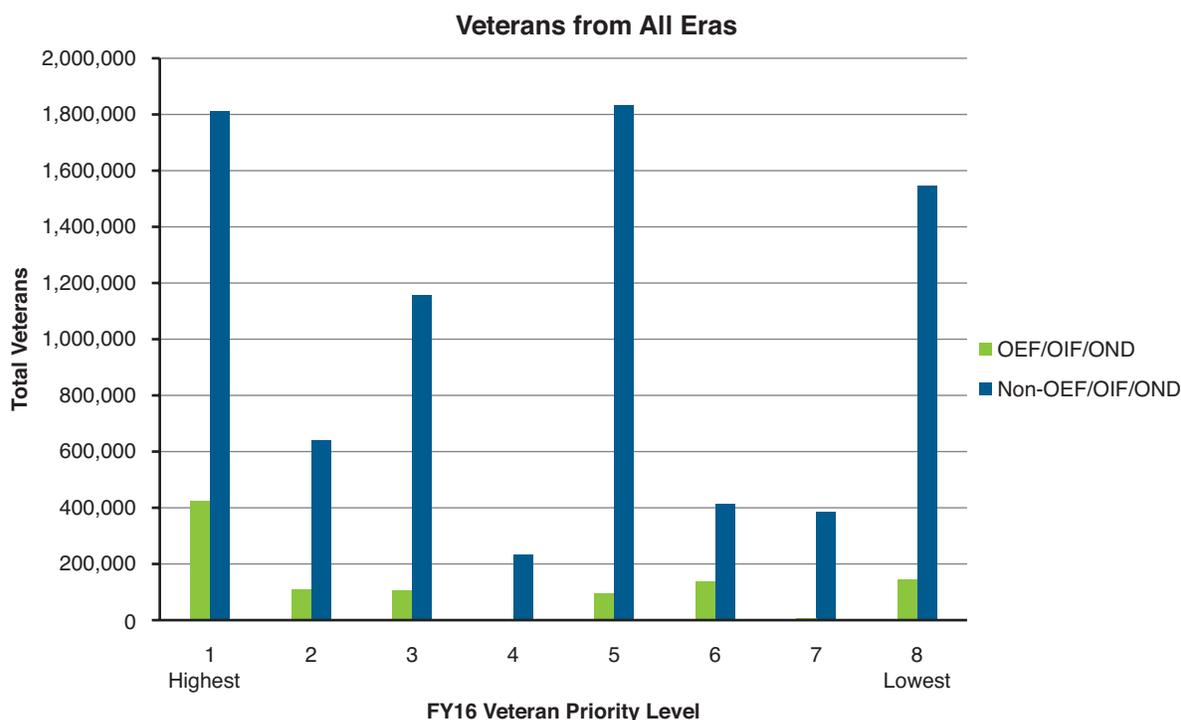


FIGURE 6-1 Number of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans versus number of non-OEF/OIF/OND veterans enrolled in each Department of Veterans Affairs (VA) priority group in FY 2016. Priority group 1 has the highest priority and priority group 8 has the lowest priority. SOURCE: Adapted from personal communication, Stacy Gavin, Department of Veterans Affairs, May 25, 2017.

Figure 6-1 shows the distribution of enrolled OEF/OIF/OND veterans and other-era veterans among the priority groups. Priority groups 1, 6, and 8 have the highest numbers of OEF/OIF/OND veterans enrolled; priority groups 1, 5, and 8 have the highest numbers of veterans of other eras. Of the 1,024,330 OEF/OIF/OND veterans who are enrolled in VA health care, 604,871 of them used VA health care services in FY 2016. Figure 6-2 shows the distribution among the priority groups of OEF/OIF/OND veterans who are enrolled in VA health care and also use the health care services. Not all enrolled veterans actively use the health care services. The highest number of OEF/OIF/OND enrollees and users are in priority groups 1, 2, and 3. About 60 percent of OEF/OIF/OND enrollees use VA health services. This number is lower than the number of other-era enrollees who use VA health services, which is about 72 percent.

KEY CHARACTERISTICS OF THE OPERATION ENDURING FREEDOM, OPERATION IRAQI FREEDOM, AND OPERATION NEW DAWN COHORT WHO USE AND DO NOT USE VETERANS HEALTH ADMINISTRATION SERVICES

Mental health conditions are the third most frequently diagnosed category of conditions at the VA, for both men and women (Frayne et al., 2014; VA, 2015b). Among veterans not using the VA for mental

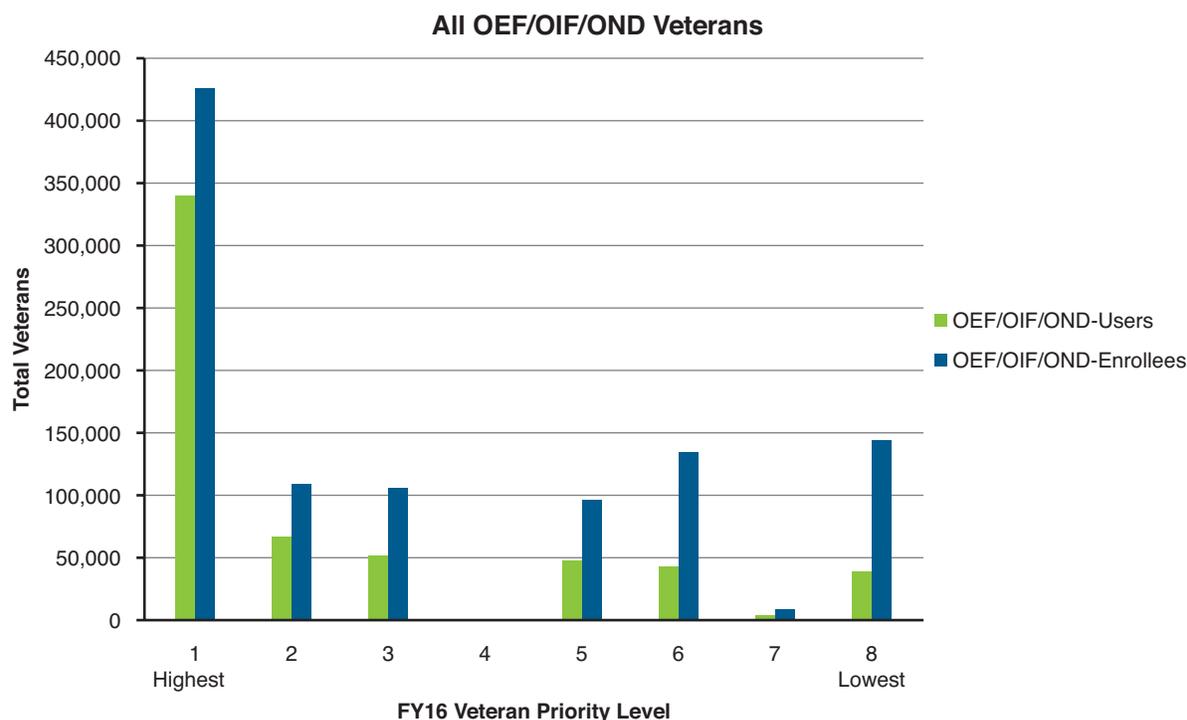


FIGURE 6-2 Number of OEF/OIF/OND veterans enrolled in each VA priority group versus number of OEF/OIF/OND veterans enrolled and using VA health care services in FY 2016. Priority group 1 has the highest priority and priority group 8 has the lowest priority.

SOURCE: Adapted from personal communication, Stacy Gavin, Department of Veterans Affairs, May 25, 2017.

health services, many may not need mental health services. However, as described in Chapter 11, there are veterans who would benefit from mental health services but are not using them.

Demographic data on veterans not using VA health services are often difficult to come by because there is no standardized way of tracking all service members once they separate from the military. Because data on veterans not using VA services are not often collected, the committee was instructed in the congressional legislation mandating this study to specifically seek out and survey OEF/OIF/OND veterans who are not currently or have never used VA mental health services. As a result, many of the demographic data for non-users come from the survey conducted for this study, as described in Chapter 5, and these data are presented below. It is important to note that all weighted numbers from the committee's survey reported in this chapter and the following chapters represent estimates of the numbers of veterans, unless otherwise specified.

Demographics and Service Branch

This section summarizes the committee's survey results related to the demographics of the OEF/OIF/OND cohort. Table 6-1 presents the demographics of the OEF/OIF/OND veterans from the committee's survey. Most OEF/OIF/OND veterans are under 50 (72 percent); the most common age category is 30–39 years of age, representing 35 percent of the total population. Twenty-one percent of

OEF/OIF/OND veterans are female. Among the chosen race/ethnicity categories, 66 percent of the veterans in the study are non-Hispanic white; 13 percent are non-Hispanic black, 12 percent are Hispanic, and the remaining 9 percent are various other races. Almost half (47 percent) of OEF/OIF/OND veterans have a 4-year college degree or more. Almost two-thirds are married or in a civil commitment or union (64 percent), and the rest of the cohort is split relatively evenly between never married and formerly married. About three-quarters of these veterans are employed. The income of these veterans varies widely, with a similar percentage making less than \$25,000 per year (12 percent) as there are making more than \$150,000 (11 percent) per year. Allowing for missing responses to the survey question, 10 to 11 percent of the OEF/OIF/OND veterans surveyed do not have health insurance.

The descriptive statistics in Table 6-1, which are estimates derived from the committee's survey, are reasonably comparable to estimates produced by the VA for the OEF/OIF/OND veteran population (VA, 2017c). About 74 percent of OEF/OIF/OND veterans in the VA estimates are under age 45, whereas in Table 6-1, 72 percent of OEF/OIF/OND veterans are under 50. A greater percentage of OEF/OIF/OND veterans in the study population from the committee's survey are married or in a civil commitment or union (64 percent; Table 6-1) than among OEF/OIF/OND veterans (54 percent) in the VA estimates. In the study population, 66 percent were white non-Hispanic (Table 6-1), versus 67 percent of OEF/OIF/OND male veterans and 56 percent of OEF/OIF/OND female veterans from the VA estimates. More of the OEF/OIF/OND veterans in Table 6-1 had a 4-year college degree or more than did OEF/OIF/OND veterans in the VA estimates (47 versus 30 percent). The percentage of OEF/OIF/OND veterans without health insurance in Table 6-1 (10 percent) was similar to that of OEF/OIF/OND veterans in the VA estimates (6.7 percent).

The distribution of demographic characteristics for the OEF/OIF/OND population (the population used in the committee's survey that includes veterans who began their service prior to 9/11 but who served in OEF/OIF/OND) differs from that of the broader veteran population (veterans of all eras). The OEF/OIF/OND population is much younger, as 79 percent of all other veterans are age 55 or older (VA, 2017c). While 21 percent of OEF/OIF/OND veterans are female, 9 percent of the overall veteran population is female (VA, 2017b). The percentages of white non-Hispanic veterans in OEF/OIF/OND versus all veterans are 66 versus 77 percent (VA, 2017b). The OEF/OIF/OND population has a higher level of educational attainment (4-year college degree or more) than the overall veteran population (47 versus 27 percent) (VA, 2017c). Similar percentages of OEF/OIF/OND veterans and all other veterans are married (64 versus 65 percent) (VA, 2017c). The percentage of all other veterans without health insurance coverage is lower than among OEF/OIF/OND veterans (3 versus 10 percent) (VA, 2017c).

Table 6-2 presents the military characteristics of OEF/OIF/OND veterans, which are estimates derived from the committee's survey. An overwhelming majority served on active duty (79 percent), with 20 percent being in the National Guard or Reserve forces. The Army is the most common branch of service (46 percent), followed by the Air Force (20 percent), Navy or Coast Guard (19 percent), Marine Corps (9 percent), and multiple branches (5 percent). Only 20 percent were officers, and 79 percent were enlisted personnel. A slight majority (53 percent) of the veterans were deployed in support of OEF/OIF/OND (includes deployments to combat area, non-combat area, or training mission). Twenty-five percent of the veterans were deployed for 12 months or less and 28 percent for more than 12 months.

Most veterans—59 percent—were never deployed into a combat area, while 18 percent had one combat deployment and 22 percent had more than one. Among those veterans who were deployed to a combat area, the deployment locations varied. Twenty-three percent were deployed to more than one location, 26 percent were deployed to Iraq only, 10 percent were deployed to Afghanistan only, and 16 percent were deployed to other areas. Most veterans reported a low combat exposure (81 percent). The combat exposure variable is based on the Deployment Risk and Resilience Inventory (DRRI) Com-

TABLE 6-1 Survey Estimates of the Demographic Characteristics of the OEF/OIF/OND Veteran Population (population size about 4.1 million)

Demographic Characteristics	Unweighted n	Weighted N	Weighted %	Standard Error %
Total	4,180	4,179,998	100%	
Age				
17 to 29 years old	617	633,990	15.2%	0.5%
30 to 39 years old	1,502	1,444,386	34.6%	0.9%
40 to 49 years old	939	923,549	22.1%	0.6%
50 years old and older	1,086	1,104,789	26.4%	0.8%
Missing	36	73,284	1.8%	0.4%
Gender				
Male	2,946	3,303,305	79.0%	0.8%
Female	1,220	859,250	20.6%	0.8%
Missing	14	17,442	0.4%	0.1%
Race/Ethnicity				
Non-Hispanic White only	2,636	2,762,440	66.1%	0.8%
Non-Hispanic Black only	644	537,059	12.8%	0.5%
Hispanic	503	490,740	11.7%	0.6%
Other or multiple races	349	355,834	8.5%	0.6%
Missing	48	33,924	0.8%	0.1%
Education				
Less than a 4-year college degree	2,204	2,218,603	53.1%	1.0%
4-year college degree or more	1,969	1,956,133	46.9%	1.0%
Refused	1	796	0.0%	0.0%
Don't know	1	463	0.0%	0.0%
Missing	5	4,002	0.1%	0.1%
Marital status				
Married or civil commitment or union	2,585	2,688,394	64.3%	0.7%
Never married	711	745,414	17.8%	0.6%
No longer married	868	732,858	17.5%	0.7%
Don't know	5	1,959	0.0%	0.0%
Missing	11	11,373	0.3%	0.1%
Employment				
Not employed	1,092	959,181	22.9%	0.7%
Employed	2,992	3,104,253	74.3%	0.8%
Missing	96	116,563	2.8%	0.4%
Annual income				
Less than \$10,000	117	104,291	2.5%	0.2%
\$10,000 to \$24,999	418	386,506	9.2%	0.6%
\$25,000 to \$49,999	867	789,738	18.9%	0.8%
\$50,000 to \$74,999	927	919,022	22.0%	0.7%
\$75,000 to \$99,999	647	679,617	16.3%	0.7%
\$100,000 to \$149,999	679	739,934	17.7%	0.8%
\$150,000 or more	427	471,177	11.3%	0.5%
Refused	27	20,528	0.5%	0.1%
Don't know	26	18,778	0.4%	0.1%
Missing	45	50,406	1.2%	0.2%
Health insurance				
Not insured	644	427,500	10.2%	0.4%
Insured	3,357	3,519,268	84.2%	0.4%
Missing	179	233,229	5.6%	0.5%

NOTE: Individual item counts may not sum to total counts due to rounding. Missing includes skipped items.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-2 Survey Estimates of the Military Characteristics of the OEF/OIF/OND Veteran Population (population size about 4.1 million)

Military Experience Characteristics	Unweighted n	Weighted N	Weighted %	Standard Error %
Total	4,180	4,179,998	100%	
Military status				
Active	3,409	3,302,287	79.0%	0.9%
Reserve/Guard	751	843,162	20.2%	0.8%
Refused	2	3,271	0.1%	0.1%
Missing	18	31,278	0.7%	0.2%
Branch of service				
Army	2,000	1,903,401	45.5%	0.8%
Marine Corps	382	385,290	9.2%	0.5%
Navy/Coast Guard	727	806,405	19.3%	0.7%
Air Force	816	842,734	20.2%	0.7%
Multiple branches	239	214,173	5.1%	0.4%
Refused	1	320	0.0%	0.0%
Missing	15	27,675	0.7%	0.2%
Rank				
Officer	751	831,056	19.9%	0.9%
Enlisted	3,411	3,319,462	79.4%	0.8%
Refused	4	6,784	0.2%	0.1%
Don't know	1	463	0.0%	0.0%
Missing	13	22,231	0.5%	0.1%
Total length of deployments				
No deployment	1,195	1,925,786	46.1%	0.7%
1 to 12 months	1,317	1,053,685	25.2%	0.7%
More than 12 months	1,643	1,173,158	28.1%	0.7%
Refused	10	8,822	0.2%	0.1%
Missing	15	18,546	0.4%	0.1%
Number of deployments to combat area				
None	1,643	2,473,530	59.2%	0.5%
One	1,170	762,825	18.2%	0.5%
More than one	1,330	909,445	21.8%	0.6%
Refused	11	5,331	0.1%	0.0%
Missing	26	28,865	0.7%	0.1%
Location of deployments among the deployed				
Iraq only	942	577,324	25.9%	0.9%
Afghanistan only	325	224,833	10.1%	0.6%
Other combat area	472	360,752	16.2%	0.8%
Multiple combat areas	765	511,755	23.0%	0.9%
No combat deployments	450	546,537	24.5%	1.1%
Missing	6	5,643	0.3%	0.1%
Exposure to combat and aftermath of battle				
Low	3,007	3,380,131	80.9%	0.5%
Moderate	868	599,552	14.3%	0.4%
High	214	147,050	3.5%	0.3%
Don't know	1	583	0.0%	0.0%
Missing	90	52,681	1.3%	0.1%

TABLE 6-2 Continued

Military Experience Characteristics	Unweighted n	Weighted N	Weighted %	Standard Error %
Service-connected disability				
Less than 50% disability	830	745,488	17.8%	0.6%
50% or more disability	1,174	737,603	17.6%	0.5%
No disability	2,095	2,605,612	62.3%	0.6%
Refused	51	56,024	1.3%	0.2%
Don't know	1	556	0.0%	0.0%
Missing	29	34,715	0.8%	0.2%
Treatment for physical condition(s) during the past 24 months				
Yes	1,761	1,123,721	26.9%	0.5%
No	2,330	2,971,336	71.1%	0.5%
Missing	89	84,940	2.0%	0.2%

NOTE: Individual item counts may not sum to total counts due to rounding. Missing includes skipped items.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

bat Exposure and Aftermath of Battle subscale grouped into the following categories: low (0 to 17), moderate (18 to 35), and high (36 to 45). Looking at the reported treatment for services, most of these veterans did not report having a service-connected disability (62 percent), and the proportion of veterans having a service-connected disability of less than 50 percent (18 percent) was the same as those with more than 50 percent disability (18 percent). Just over a quarter (27 percent) of the veterans reported having been in treatment for a physical condition during the previous 24 months.

Geographic Distribution of Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn Veterans

The committee's survey was not designed to describe the geographic distribution of OEF/OIF/OND veterans. However, the U.S. Bureau of the Census American Community Survey (ACS) can be used to obtain that distribution, which can then be compared to the geographic distribution of all veterans. The ACS survey data are based on self-report of veteran status and service period and, therefore, do not align perfectly with the sample frame used for the committee's survey, which used administrative records from the VA.

With regard to where veterans are living, Figure 6-3 shows the most populated Veterans Integrated Service Networks (VISNs) in 2014. As noted in Chapter 2, the VA is in the process of realigning its VISNs and, therefore, the current numbers and borders of the VISNs may differ from those in Figure 6-3. VISN 16 (South Central VA Health Care Network) is the most populated with veterans, and it contains the states of Arkansas, Louisiana, and Mississippi, as well as parts of Texas, Missouri, Alabama, and Florida. VISN 16 is projected by the VA to remain the most populated VISN for the next 25 years (VA National Center for Veterans Analysis and Statistics, 2016). For all veterans in total, as well as veterans under age 50, VA predicts that the south will remain the most heavily populated region by veterans, with clusters of veteran populations scattered throughout the rest of the country.

The ACS routinely collects data on U.S. adults' self-reports of veteran status and service era. In 2015, the ACS estimated that approximately 1.2 percent of the U.S. population 18 and older is a U.S. military veteran. As shown in Table 6-3, on the basis of ACS self-reports, about 1 in 6 (16.7 percent) of all surviving U.S. veterans included in the 2015 ACS sample report having served in the U.S. Armed Forces after September 2001.

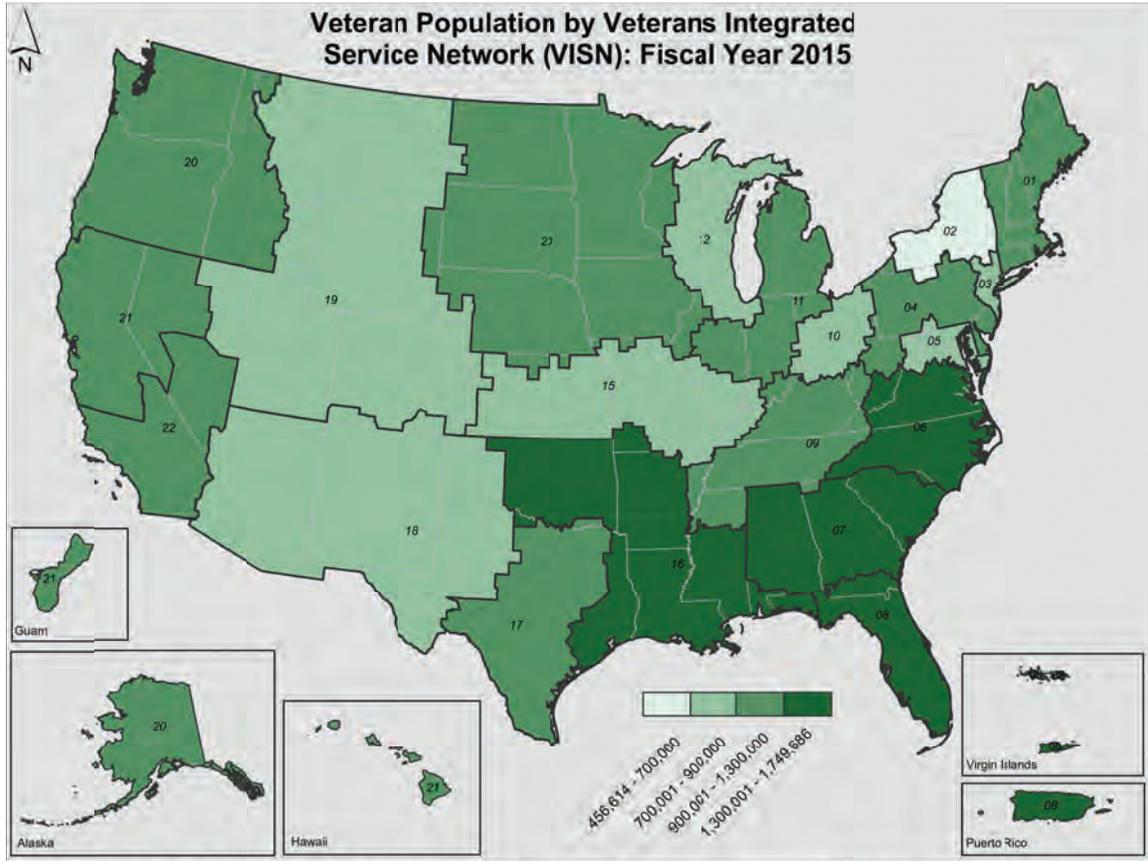


FIGURE 6-3 Veteran population by Veterans Integrated Service Network, FY 2015.
SOURCE: VA, 2015f.

Likely due to the all-volunteer nature of the force and how recently they have served, OEF/OIF/OND-era veterans are numerically most concentrated in large, more populous states that also have large active U.S. military installations. In terms of absolute numbers, the top six states (see Table 6-4) account for an estimated 40 percent of the total OEF/OIF/OND veteran population.

TABLE 6-3 Percent of U.S Armed Forces Veterans by Service Era

Service Era	% of Total Surviving Veterans
Total	100%
OIF/OEF/OND	16.7%
Persian Gulf War	19.3%
Vietnam War	36.0%
Korean War	9.5%
WW II	5.0%
All other periods	13.5%

NOTE: Population estimates from the 2015 American Community Survey.
SOURCE: U.S. Census Bureau, 2015.

TABLE 6-4 Six States with Largest Populations of OEF/OIF/OND Veterans

State of Residency	2015 ACS Estimated Percent of OEF/OIF/OND Veterans
Texas	10%
California	9%
Florida	7%
Virginia	6%
Georgia	4%
North Carolina	4%
All other states/territories	60%
Total	100%

NOTE: Population estimates from the 2015 American Community Survey.

SOURCE: U.S. Census Bureau, 2015.

Mental Health Profile and Classification of Mental Health Care Need

This section summarizes the mental health profile of the group of OEF/OIF/OND veterans using estimates derived from the committee's survey of veterans. The results are used to identify the need for mental health services among the OEF/OIF/OND veteran population. Estimating the need for mental health services is important to the question of why some veterans who need mental health care are not enrolled in VA mental health services. Many of the committee's survey analyses in the report use the findings reported here.

The committee's survey assessed the need for mental care using an analytic approach that dichotomized all OEF/OIF/OND veterans into two need groups—those who have a mental health need and those without a mental health need. Mental health need was determined on the basis of a survey respondent's answers to (1) validated mental health screeners included in the survey, and (2) a survey question about having received a mental health diagnosis from a health care provider in the past 24 months. The five mental health screeners used in the study assessed possible recent or current symptoms of psychological distress, PTSD, major depression, alcohol dependence, and drug dependence. They are validated instruments widely used in the VA and elsewhere for identifying individuals needing further clinical assessment. Details about the screeners are in Chapter 5. A positive screening result indicates that an individual's symptoms suggest a possible problem that warrants a comprehensive assessment by a mental health professional to determine a diagnosis and whether there is a need for treatment. A diagnosis cannot be made on the basis of screening results, and, therefore, it is important to note that the committee's research did not produce an estimate of the prevalence of mental disorder diagnoses in this population. Chapter 4 has more information about VA mental health screening.

A veteran was classified as having a need for mental health care if the result on at least one mental health screener was positive or if the veteran reported receiving a mental health diagnosis from a health care provider in the previous 24 months. Table 6-5 shows percentage of OEF/OIF/OND veterans who screened positive on each mental health screener and the percentage who reported having received a mental health diagnosis in the past 24 months. Overall, 41 percent of veterans were found to have a potential need for mental health care. This estimate of mental health care need derived from the committee's survey is consistent with results found in another national survey of Iraq and Afghanistan veterans, which reported that 43 percent of Iraq and Afghanistan veterans had probable PTSD, major depression, or alcohol misuse (Elbogen et al., 2013).

TABLE 6-5 Percentage of OEF/OIF/OND Veterans Who Have a Mental Health Need* by Screener and/or Received a Mental Health Diagnosis

Mental Health Screener or Diagnosis	Unweighted n	Weighted N	Weighted %	Standard Error %
Total	4,180	4,179,998	-	-
Any mental health need based on positive screener or diagnosis:	2,007	1,705,168	41.0%	1.0%
Screened positive on:				
Psychological distress (Kessler) screener	661	541,956	13.0%	0.6%
PTSD screener	1,279	965,520	23.2%	0.8%
Depression screener	795	682,963	16.4%	0.7%
Alcohol dependence screener	239	220,025	5.3%	0.5%
Drug dependence screener	116	111,223	2.7%	0.3%
Mental health diagnosis in past 24 months	1,502	1,179,971	28.4%	0.9%

NOTES: Percentages will not sum to 100 percent because OEF/OIF/OND veterans may screen positive for more than one condition.

*Mental health need could not be determined for 16 cases.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Results from the individual mental health screeners in the committee's survey showed 23 percent of the veterans screened positive for PTSD, 16 percent screened positive for major depression, and 13 percent screened positive on the Kessler six-item measure of general psychological distress. Five percent screened positive for alcohol dependence and 3 percent for drug abuse. In the survey by Elbogen et al. (2013), 20 percent screened positive for PTSD, 24 percent for major depression, and 27 percent for alcohol misuse. The large discrepancy between these two studies in the percentage scoring positive for problem drinking is likely accounted for by the different cut-offs each study used to score the Alcohol Use Disorder Identification Test scale, which assesses problems with drinking.

In the committee's survey, 28 percent of OEF/OIF/OND veterans self-reported that they had received at least one mental health diagnosis in the previous 24 months. Among those who had a positive result on the mental health screeners, nearly 7 in 10 reported having had received a mental health diagnosis. Information on mental health and substance use disorders in the U.S. general population can be found in Chapter 4.

NEED FOR AND USE OF DEPARTMENT OF VETERANS AFFAIRS HEALTH CARE SERVICES

OEF/OIF/OND veterans have enrolled in VA health care at a higher rate than veterans from previous service eras. Since October 2001, approximately 61 percent of OEF/OIF/OND veterans have obtained some sort of health care (not just mental health care) at the VA (VA, 2015b). OEF/OIF/OND veterans are also more likely than members of other cohorts to have service-connected disabilities that bring them to the VA for care (RAND Corporation, 2015). Concerning veterans who do not use VA health services, it is estimated that "approximately 140,000 new veterans become eligible each year to receive health care through the VA," but as noted above only slightly more than half of those veterans go on to actually use any of VA's health care services (Lee et al., 2015). The VA itself similarly estimates that just under 40 percent of veterans have never used the VA for any health care service (VA, 2015b).

Distribution of Mental Health Service Need and Use

Estimates derived from the committee's survey results provide insight into whether the VA is addressing the mental health care needs of OEF/OIF/OND veterans. Survey respondents, which included both users and non-users of VA services, were categorized in terms of (1) their possible need for mental health services (see discussion in previous section) and (2) their actual use of mental health services. Veterans were classified as *users* if they had received mental health care in the past 24 months from either the VA or from a non-VA provider. Veterans who did not receive mental health care in the past 24 months were considered *non-users*.

Table 6-6 shows the results of the analyses of the need for and use of mental health services. According to Table 6-5 above, 6 in 10 (59 percent) of OEF/OIF/OND veterans did not have a need for mental health services. Table 6-6 shows that among the remaining 41 percent who did have a mental health need, over half (55 percent) did not seek care, while 28 percent used VA services, and an additional 16 percent (8 percent of all OEF/OIF/OND veterans) sought non-VA care only. Among those who did not have a mental health need, there was negligible use of services, either VA or non-VA—that is, there were few false positives.

The presence of demographic differences between veterans who needed mental health services and those who did not are evident in Table 6-6. The differences by gender and race/ethnicity are quite modest. Only small differences were found for women relative to men, as well as for blacks and Hispanics relative to non-Hispanic whites. In contrast, much larger differences are evident by education, marital and employment status, and having or not having health insurance. Those with less than a college degree, who are no longer married, who are unemployed, and do not have health insurance are all disproportionately represented among those having a mental health need versus those with a college degree or more, who are married, employed, and who have health insurance, respectively. That is, the latter are all more likely to be among those with no need for mental health services.

To summarize Tables 6-5 to 6-7, the survey data demonstrate several important relationships between the need for and use of mental health care services among OEF/OIF/OND veterans. First, about 41 percent, or about 1.7 million veterans, in this cohort have a mental health need, as shown Table 6-5. Second, of the remaining 2.5 million or so veterans who do not have a mental health need, the overwhelming majority (96 percent) do not use either VA or non-VA mental health services; see Table 6-6. Third, Table 6-6 also shows that of those 1.7 million or so veterans who do have a mental health need, over half (55 percent) are not using any mental health services; that is, there is a substantial level of potential unmet need for mental health services in this cohort. Finally, Table 6-7 shows that of those veterans who have a mental health need and do use mental health services, about 36 percent use non-VA mental health services, but the majority (64 percent) use the VA's mental health services.

User Groups and Sources of Service Use

The committee's survey also allowed for a more detailed breakdown of these user groups by the sources the veterans used for mental health services. Specifically, to further examine where OEF/OIF/OND veterans were receiving these services, the committee described the types of health care providers seen by veterans in each use group, as shown in Table 6-7. Overall, 64 percent of all OEF/OIF/OND veterans who had a mental health need and sought care used the VA. Within that group, about 62 percent (or 39 percent of all veterans with need who use the VA) access mental services through a combination of a VA primary care provider, VA mental health treatment facilities, and Vet Centers, while 23 percent (15 percent out of the 64 percent) use a VA primary care provider only, and 8 percent (4.8 percent out of the 64 percent) use VA mental health facilities only, and 4 percent (2.5 percent out of 64 percent) use Vet Centers only.

TABLE 6-6 Percentage of OEF/OIF/OND Veterans by Mental Health Need,* Service Use, and Demographic Characteristics

Demographic Characteristics	All OEF/OIF/OND Veterans				Mental Health Need				No Mental Health Need							
	Unwgt n	Wgt n	Wgt %	SE %	Unwgt n	Wgt n	Wgt %	SE %	Unwgt n	Wgt n	Wgt %	SE %	Unwgt n	Wgt n	Wgt %	SE %
Total	4,180	4,179,998	100%	-	2,007	1,705,168	100%	-	2,157	2,453,388	100%	-				
Mental health service use																
No use	2,915	3,296,850	79.3%	0.6%	890	941,504	55.2%	1.2%	2,025	2,355,346	96.0%	0.6%				
VA use	913	515,925	12.4%	0.4%	849	476,654	28.0%	0.9%	64	39,270	1.6%	0.3%				
Non-VA use only	308	317,086	7.6%	0.5%	256	272,799	16.0%	1.2%	52	44,287	1.8%	0.4%				
Missing	28	28,694	0.7%	0.2%	12	14,210	0.8%	0.3%	16	14,484	0.6%	0.2%				
Gender																
Male	2,946	3,303,305	79.0%	0.8%	1,359	1,312,186	77.0%	1.1%	1,572	1,969,877	80.3%	1.2%				
Female	1,220	859,250	20.6%	0.8%	642	386,589	22.7%	1.1%	577	472,461	19.3%	1.2%				
Missing	14	17,442	0.4%	0.1%	6	6,393	0.4%	0.2%	8	11,050	0.5%	0.2%				
Race/Ethnicity																
Non-Hispanic white only	2,636	2,762,440	66.1%	0.8%	1,187	1,071,175	62.8%	1.3%	1,441	1,681,093	68.5%	1.0%				
Non-Hispanic black only	644	537,059	12.8%	0.5%	371	254,662	14.9%	0.8%	271	280,705	11.4%	0.7%				
Hispanic	503	490,740	11.7%	0.6%	263	223,566	13.1%	1.1%	238	265,738	10.8%	0.5%				
American Indian/Alaska Native	109	108,708	2.6%	0.4%	69	54,395	3.2%	0.5%	40	54,313	2.2%	0.5%				
Other or multiple races	240	247,127	5.9%	0.6%	92	86,354	5.1%	0.6%	144	152,630	6.2%	0.7%				
Missing	48	33,924	0.8%	0.1%	25	15,015	0.9%	0.2%	23	18,909	0.8%	0.2%				
Education																
Less than a 4-year college degree	2,204	2,218,603	53.1%	1.0%	1,233	1,086,043	63.7%	1.2%	960	1,117,194	45.5%	1.4%				
4-year college degree or more	1,969	1,956,133	46.8%	1.0%	770	617,723	36.2%	1.2%	1,194	1,332,334	54.3%	1.4%				
Refused	1	796	0.0%	0.0%	-	-	-	-	1	796	0.0%	0.0%				
Don't know	1	463	0.0%	0.0%	1	463	0.0%	0.0%	-	-	-	-				
Missing	5	4,002	0.1%	0.1%	3	938	0.1%	0.0%	2	3,064	0.1%	0.1%				

Marital status												
Married or civil commitment or union	2,585	2,688,394	64.3%	0.7%	1,119	961,783	56.4%	1.4%	1,457	1,713,737	69.9%	0.9%
Never married	711	745,414	17.8%	0.6%	356	337,130	19.8%	1.3%	351	403,114	16.4%	0.8%
No longer married	868	732,858	17.5%	0.7%	522	399,266	23.4%	1.2%	344	332,230	13.5%	0.8%
Don't know	5	1,959	0.0%	0.0%	5	1,959	0.1%	0.1%	-	-	-	-
Missing	11	11,373	0.3%	0.1%	5	5,031	0.3%	0.2%	5	4,306	0.2%	0.1%
Employment												
Not employed	1,092	959,181	22.9%	0.7%	716	546,752	32.1%	1.1%	371	405,989	16.5%	1.0%
Employed	2,992	3,104,253	74.3%	0.8%	1,244	1,117,750	65.6%	1.2%	1,740	1,975,355	80.5%	1.1%
Missing	96	116,563	2.8%	0.4%	47	40,666	2.4%	0.4%	46	72,043	2.9%	0.5%
Health insurance												
Not insured	644	427,500	10.2%	0.4%	464	292,944	17.2%	0.9%	178	133,309	5.4%	0.6%
Insured	3,357	3,519,268	84.2%	0.6%	1,450	1,295,612	76.0%	1.2%	1,894	2,205,496	89.9%	0.9%
Missing	179	233,229	5.6%	0.5%	93	116,612	6.8%	0.7%	85	114,582	4.7%	0.5%

NOTES: Columns and rows may not sum to totals due to missing values. Missing includes skipped items. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

*Mental health need could not be determined for 16 cases.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-7 Description of Service Use Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Use Mental Health Services

User Group and Source Of Service Use	Unweighted n	Weighted N	Weighted %	Standard Error %
Total users of mental health services	1,105	749,453	100%	-
Need, VA user	849	476,654	63.6%	
VA primary care provider only	189	110,095	14.7%	1.1%
VA mental health treatment facility only	73	36,155	4.8%	0.6%
Vet Center only	33	19,032	2.5%	0.6%
A combination of the above sources	521	294,341	39.3%	1.7%
Unspecified service use	30	16,056	2.1%	0.5%
Missing	3	974	0.1%	0.1%
Need, non-VA user	256	272,799	36.4%	
Non-VA provider, paid for by the VA	9	9,145	1.2%	0.6%
Other, not paid for by the VA	241	259,356	34.6%	2.1%
A combination of the above sources	6	4,299	0.6%	0.3%

NOTE: Responses may not sum to 100% due to rounding. Missing includes skipped items.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Thirty-six percent of veterans who have a mental health need and who seek care use non-VA providers. Nearly all of these veterans (35 percent of the 36 percent) use care in the private sector that is completely independent of the VA (that is, is not paid for by the VA).

Potential and Perceived Need for Mental Health Services

In addition to measuring the potential need for mental health care on the basis of screening results or a reported diagnosis as previously described under Mental Health Profile and Classification of Mental Health Care Need, the committee's survey of users and non-users of VA health services assessed whether veterans *perceived* a need for professional help. To measure perceived need for mental health care, veterans were asked, "Was there ever a time in the past 24 months when you felt you might need to see a professional because of your problems with emotions or nerves or your use of alcohol or drugs?" The committee was interested in exploring this perception of need because it could be critically important in understanding whether help is actually sought.

Table 6-8 shows (1) the number of veterans who have a mental health need based on the screeners and diagnoses, (2) the percentage who report having a perceived mental health care need, and (3) their combined relationships with use of mental health services. Table 6-8 highlights several important facts. One is that of the estimated 1.7 million OEF/OIF/OND veterans who have a mental health need, only about half (47 percent) perceive that they might have a mental health care need, suggesting that self-awareness regarding one's mental health is not synonymous with screening positive or being told by a medical professional that one has such a need. Indeed, since over half of the veterans (52 percent) who have a positive screen or a reported diagnosis did not perceive a need for mental health services, it seems likely that a major reason for veterans not seeking care is that they personally do not perceive a need for such services.

While a veteran's perceptions about whether he or she needs mental health services are not the same as assessed need according to a clinician's diagnosis or a positive result on a screening test, veterans' perceptions are reasonably well correlated with assessed need, in the following sense. If a veteran perceives

TABLE 6-8 Percentage of OEF/OIF/OND Veterans by Mental Health Need, Perceived Need,* and User Group

Demographic Characteristics	All OEF/OIF/OND Veterans					Mental Health Need					No Mental Health Need									
	Unwgt n	Wgt N	Wgt %	SE %		Unwgt n	Wgt N	Wgt %	SE %		Unwgt n	Wgt N	Wgt %	SE %		Unwgt n	Wgt N	Wgt %	SE %	
Total	4,180	4,179,998	100%	-		2,007	1,705,168	100%	-		2,157	2,453,388	100%	-						
Perceived need	1,100	915,775	21.9%	0.9%		961	799,982	46.9%	1.6%		139	115,793	4.7%	0.5%						
No use	453	452,189	10.8%	0.7%		338	353,079	20.7%	1.1%		115	99,110	4.0%	0.5%						
VA use	456	260,502	6.2%	0.3%		456	260,502	15.3%	0.7%		-	-	-	-						
Non-VA use only	159	177,910	4.3%	0.4%		159	177,910	10.4%	0.9%		-	-	-	-						
Missing user group	32	25,174	0.6%	0.1%		8	8,491	0.5%	0.2%		24	16,683	0.7%	0.2%						
No perceived need	3,042	3,223,961	77.1%	0.9%		1,032	891,739	52.3%	1.5%		2,008	2,328,150	94.9%	0.5%						
No use	2,448	2,828,944	67.7%	0.9%		547	581,244	34.1%	1.4%		1,901	2,247,700	91.6%	0.7%						
VA use	386	212,964	5.1%	0.3%		386	212,964	12.5%	0.7%		-	-	-	-						
Non-VA use only	95	91,812	2.2%	0.3%		95	91,812	5.4%	0.7%		-	-	-	-						
Missing user group	113	90,241	2.2%	0.3%		4	5,719	0.3%	0.2%		107	80,450	3.3%	0.5%						

NOTES: Responses may not sum to totals due to rounding. Columns and rows may not sum to totals due to rounding or due to missing values in perceived need or mental health need. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

* As measured by the survey item, "Was there ever a time in the past 24 months when you felt you might need to see a professional because of your problems with emotions or nerves or your use of alcohol or drugs?"

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

that he or she has a mental health need, the perception agrees with the screening result about 87 percent of the time (799,982 veterans with positive screens or a reported diagnosis out of 915,775 veterans with perceived need). On the other hand, if a veteran perceives that he or she does not have a mental health need, this agrees with the screening result about 72 percent of the time (2,328,150 veterans who do not have a positive screen or a reported diagnosis out of 3,223,961 with no perceived need).

In keeping with this relatively strong association between assessed and perceived need, Table 6-8 further explores the role of perceived need on the relationship between assessed need and service use. First, for those estimated 2.5 million veterans with no assessed mental health care needs, the overwhelming majority of 96 percent (2,346,810 non-users out of 2,453,388) do not use mental health services. This is true whether or not they perceive need (86 percent or 99,110 non-users out of 115,793 veterans with perceived need and no mental health need; 97 percent or 2,247,700 non-users out of 2,328,150 veterans with no perceived need and no mental health need).

Next, consider those estimated 1.7 million veterans with mental health care needs. Among these veterans with assessed needs, about half (52 percent) do not perceive a need and about half (47 percent) do perceive a need, as mentioned above. Of those who have a need but do not perceive it, about 65 percent do not seek care (581,244 veterans out of 891,739). One might expect that none of these veterans would seek care if they do not believe that they need to see a mental health provider, but in fact about a third (34 percent or 304,776 veterans out of 891,739) still seek care.

Finally, of these estimated 799,982 veterans who have an assessed need and perceive a need, about 44 percent (353,079 veterans out of 799,982) do not seek care, despite their perception. About 55 percent of veterans with assessed and perceived need do seek care (438,412 veterans out of 799,982), in contrast with only 34 percent of veterans with assessed need but no perceived need.

The results in Table 6-8 show that the perception of a mental health condition is an important factor in the likelihood of getting care, although some veterans who do not perceive that they need mental health care still do seek mental health services. It could be possible that these veterans may not perceive a need for care because their needs are being met and the care is working. Veterans who have an assessed need and perceive such a need are more likely to seek care than those who do not perceive their need, but there remains a substantial chance that they will not seek care despite their perceived need. This lack of perception of need for mental health care is among the barriers to accessing care. Other barriers are discussed below.

Table 6-9 examines the relationship between assessed need (positive screen or reported diagnosis) and perceived need for mental health care. A veteran's likelihood of perceiving a need for mental health care varies by the different screeners that the committee used to assess need. Looking at mental health care need by the individual screeners, Table 6-9 shows that, among those who screened positive for PTSD, 53 percent perceived they had a need for care. The same percentage reported having received a diagnosis. Veterans who screened positive for drug dependence or alcohol dependence are the most likely to have a perceived need for care (75 and 67 percent, respectively). Forty-seven percent of veterans had a positive screener or diagnosis and had a perceived need. Sixty percent of veterans with two or more positive screeners or one or more positive screeners and a reported diagnosis perceived a need for mental health care.

Logistic regression analysis was used to examine how demographic characteristics and experiences affect the likelihood of having a mental health care need and the perception of a mental health care need, while adjusting for other factors such as race/ethnicity, age, and sex. This approach permits exploring the effect of any one variable on the probability of need (either perceived or assessed) while controlling for other attributes.

TABLE 6-9 Perceived Need for Mental Health Care Among OEF/OIF/OND Veterans Who Screened Positive on a Mental Health Screener or Who Reported a Mental Health Diagnosis

Screeners or Diagnosis	Perceived Need and Positive Screener: Unwgt n	Perceived Need and Positive Screener: Wgt N	Positive Screener: Unwgt n	Positive Screener: Wgt N	Perceived Need Among Those Screening Positive: Wgt %	Standard Error
Any mental health care need based on positive screener or diagnosis	961	799,982	2,007	1,705,168	46.9%	1.6
Psychological distress (Kessler) screener	435	351,815	661	541,956	64.9%	1.9
PTSD screener	681	511,504	1,279	965,520	53.0%	1.7
Depression screener	467	380,048	795	682,963	55.6%	2.0
Alcohol dependence screener	167	148,347	239	220,025	67.4%	4.1
Drug dependence screener	90	83,825	116	111,223	75.4%	4.3
Diagnosed in past 24 months	778	619,125	1,502	1,179,971	52.5%	1.6
A combination of 2 or more of the above	737	582,227	1,251	969,428	60.1%	1.5

NOTE: Weighted % will not sum to 100% because veterans may screen positive for more than one condition. Unwgt n = unweighted n; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

All logistic regression models were fitted using SAS *proc surveylogistic* to account fully for the complex survey design. Further, model fit for each logistic regression was examined using the Hosmer-Lemeshow Goodness of Fit (GOF) test (Hosmer and Lemeshow, 1980). Because this GOF test is not a feature of *surveylogistic*, the fits were recomputed using *proc logistic* with the sampling weights. This approach produces the same weighted point estimates as *proc surveylogistic* and allows calculation of the observed and expected frequencies used in the GOF test. A significant chi-square statistic indicates evidence of lack of model fit.

Table 6-10 describes the independent variables used in the regression models discussed here and in other sections of the report. These variables include demographic, socioeconomic, military/service-related experience, and clinical measures; the reference category for each variable is shown in the table. (The regression models discussed later use additional independent variables, which are shown in Table 6-20.) The combat-exposure variable was based on the DRRI Combat Exposure subscale that is discussed in more detail in Chapter 5. Because of the availability of two distinct measures of deployment (length and number of deployments), an alternative set of regression models that include the number of deployments (0, 1, 2 or more) was also estimated. Veterans who had missing data on one or more of the variables in the regression were excluded from the analysis, and, for this reason, the effective sample size varies across regression models. In the regression models, the association of each independent variable with the dependent variable was examined in bivariate regression. Only the independent variables that were statistically significant at the bivariate, or the full-model stage, were included in the final model. There were no observed changes in coefficients or standard errors between the bivariate and full models that would suggest a serious problem with multicollinearity.

TABLE 6-10 Core Independent Variables Used in the Multivariate Analyses

Variable	Description	Missing n
Female	Male (reference), Female	14
Educational level	Less than college (reference), some college, associate's or bachelor's degree, master's degree or higher	7
Marital status	Married (reference), Never married, No longer married	16
Age	18 to 29 (reference), 30 to 39, 40 to 49, 50+	36
Race	Non-Hispanic white (reference), Non-Hispanic black, Hispanic, American Indian/Alaska Native, other or multiple races	48
Income	Less than \$25,000 (reference), \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000+	98
Employment status	Employed (reference), unemployed, out of the labor force	96
Unit component	Active duty (reference), Reserve/Guard	20
Branch of service	Army (reference), Air Force, Navy/Coast Guard, Marine Corps, multiple branches	16
Rank	E4 or less (reference), E5–E6, E7–E9, Officer	18
Cumulative length of deployment	Not deployed (reference), 0–6 months, 7–12, 25–36, 37–48, more than 48 months	25
Number of combat deployments	Not deployed (reference), 1, 2 or more	37
DRRI combat exposure	Low: 0 to 17 (reference), Moderate: 18 to 35, High: 36 to 54	91
Disability rating	No disability (reference), less than 50%, 50% or more	81
PTSD score	Sum of four items such as In the past month were you constantly on guard, watchful, or easily startled? or, Felt numb, detached from others, activities, or your surroundings?	17
Drug dependence score	Sum of ten items such as In the past 12 months have you abused more than one drug at a time? or, Have you neglected your family because of your drug use?	35
Alcohol dependence score	Sum of ten items such as How often do you have six or more drinks on one occasion? or, Have you or someone else ever been injured as a result of your drinking?	32
Depression score	Sum of two items: Over the past two weeks, how often have you been bothered by any of the following problems: Little interest or pleasure in doing things? Feeling down, depressed, or hopeless?	13
Perceived mental health need	No (reference), Yes	38
Insured	Not insured (reference), Insured	179

NOTE: The Kessler scale was not included in the regressions because it is not a screener for any specific condition but rather general psychological distress.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Positive Screen for Mental Health Care Need

A logistic regression was first used to examine how demographic and military characteristics were associated with the odds of screening positive for any mental health disorder. In a second step, the committee examined each screen separately. The dependent variables in these regressions are indicators for (1) whether a veteran screened positive for any mental health disorder and (2) separately, whether he or she screened positive for specific disorders—PTSD, depression, alcohol use disorders, and drug use disorders.⁴ An additional six logistic regression models were fitted using perceived need as the dependent variable; those results are discussed in the next section.

⁴Results from the Kessler Screening Scale for Psychological Distress were not included in the regressions because it is not a screener for any specific condition but rather for general psychological distress. Only screeners for specific conditions were

TABLE 6-11 Among All OEF/OIF/OND Veterans, Adjusted Odds Ratios of Having a Mental Health Care Need (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Female	Female	1.491**	1.134	1.960
Age	50+ years old	0.657*	0.474	0.911
Marital status	No longer married	1.621**	1.259	2.088
Unit component	Reserves/Guard	0.748*	0.577	0.969
Rank	E5–E6	0.724*	0.541	0.969
Rank	E7–E9	0.543**	0.382	0.771
Rank	Officers	0.340**	0.217	0.533
Branch	Air Force	0.764**	0.623	0.937
Branch	Multiple branches	1.874**	1.427	2.462
DRRI Combat	Moderate	2.609**	2.026	3.359
DRRI Combat	High	8.544**	4.607	15.845
Employment	Not employed	2.310**	1.609	3.316
Employment	Not in labor force	1.861**	1.404	2.467
Income	\$75,000 or more	0.649*	0.465	0.905
Disability rating	Disability 50 percent or higher	3.837**	3.032	4.856
Disability rating	Disability less than 50 percent	1.477**	1.191	1.833

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

4,180 unweighted cases initially available, 613 unweighted cases excluded due to missing responses.

Model includes 3,567 unweighted cases representing weighted N of 3,493,024.

The reference category for each variable is shown in Table 6-10.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Table 6-11 shows the adjusted odds ratios from the logistic regression model of the probability of having a mental health care need that includes the cumulative length of deployment instead of the number of deployments as a covariate. Odds ratios greater than 1 indicate that the factor (variable value) is associated with an increased risk of the mental health condition relative to the base case; odds ratios less than 1 indicate that the factor is associated with a decreased risk; odds ratios equal to 1 indicate parity, that is, that there is no difference in risk. The table also shows the 95 percent confidence limits (CL) for the odds ratios. When the confidence interval includes the value 1, the odds ratio is not significantly different from 1. Reported odds ratios are adjusted for all other variables shown in the model.

Overall, this model of the probability of having a mental health care need shows that most of the independent variables are statistically significantly related to need. Combat exposure is the strongest predictor of screening positive for a mental health condition. Odds of screening positive for a mental health condition were eight times higher for veterans who were high on the DRRI combat exposure scale compared to those who scored low on the DRRI, and the odds were two times higher even among those with moderate exposure. Disability status is also a strong predictor; the odds of screening positive for a mental health need were close to four times higher among those having a disability rating of more than 50 percent compared to those with no disability, and the odds were one and a half times greater among those with less than 50 percent. Other factors associated with the increased odds of a positive mental health screen are being female, being divorced, being out of the labor force or unemployed, and having served in multiple branches of service. In contrast, being over 50, having higher income, being in the Reserves or National Guard, in the Air Force relative to the Army, and being a senior enlisted person

included in order to identify the unique effects of depression, PTSD, etc., and including results from the Kessler screener would have possibly confounded the effects, making the results difficult to interpret.

TABLE 6-12 Among All OEF/OIF/OND Veterans, Unadjusted Odds Ratios of Having a Perceived Mental Need by Mental Health Screener Scores (statistically significant variables only)

Screener score	Odds Ratio	Lower CL	Upper CL
Psychological distress (Kessler)	1.255**	1.233	1.278
PTSD	2.041**	1.940	2.148
Depression	1.797**	1.705	1.893
Alcohol dependence	1.128**	1.108	1.148
Drug dependence	1.779**	1.564	2.024
Number of positive screeners	2.634**	2.454	2.828

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

4,180 unweighted cases initially available, 655 unweighted cases excluded due to missing responses.

Model includes 3,525 unweighted cases representing weighted N of 3,463,029.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

or officer ranks *lowers* the odds of screening positive for a mental health condition. Factors which are *not* significantly related to mental health need—when these other predictors are taken into account—are education level, race, cumulative length of deployments, having health insurance, scores on the individual mental health screeners, and perceived need.

Perceived Mental Health Care Need

Two additional logistic regression models were used to examine perceived need and its relationship with factors such as screener scores and demographic and military attributes, as shown in Tables 6-12 and 6-13. Refer to Table 6-10 for a list of independent variables used in the regression models. Only the independent variables that were statistically significant at the bivariate stage, or the full-model stage, were included in the final model.

The model summarized in Table 6-12 regressed perceived need against the screener results, and produced unadjusted odds ratios for the effect that each positive screen has on the probability that a person perceives that he or she has a mental health problem. This model included the continuous scores on five screener variables: psychological distress, PTSD, depression, alcohol use disorder, and drug use disorder. These variables were included to examine whether veterans with specific mental health symptoms are more or less likely to have a perceived need, as this likely affects the decision to seek

TABLE 6-13 Among All OEF/OIF/OND Veterans, Adjusted Odds Ratios of Having a Perceived Mental Health Care Need (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Female	Female	2.196**	1.648	2.927
Unit component	Reserve/Guard	0.655*	0.470	0.911
Income	\$50,000 to \$74,999	1.864**	1.337	2.599
PTSD score	Continuous	1.614**	1.492	1.747
Depression score	Continuous	1.418**	1.326	1.517
Alcohol dependence score	Continuous	1.090**	1.066	1.114
Drug dependence score	Continuous	1.346**	1.182	1.533

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

4,180 unweighted cases initially available, 655 unweighted cases excluded due to missing responses.

Model includes 3,525 unweighted cases representing weighted N of 3,463,029.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

care. By contrast, the second model included demographic variables, military experience measures, and a categorical measure of the number of mental health conditions for which a veteran screened positive (0, 1, 2 or more). This model allows us to examine the dose–response association between the number of elevated screens and the perceived need.

Table 6-12 shows the unadjusted odds ratios for the relationship between the continuous screener scores and perceived need. All of the odds ratios are positive and statistically significant, indicating that higher screener scores are associated with a higher probability of perceived need for mental health treatment. PTSD was most strongly associated with perceived need. The number of positive screens was also a strong predictor of perception of need.

Table 6-13 shows the estimated adjusted odds of perceiving a mental health care need when demographic and military experience variables are included in the model. As that table shows, few demographic factors are significantly associated with perceived need once the screener scores are taken into consideration. The only variables other than screeners associated with perceived need are gender, income, and service in the Guard/Reserve. As the results show, females have more than double the odds of perceiving a need than males and those in middle-income brackets (\$50,000 to \$75,000) have close to double the odds of perceiving a mental health need compared those in the lowest income bracket. Also, those in the Reserve/National Guard are significantly less likely than those classified as active duty to report a perceived need.

Other than these three results, none of the demographic and military experience variables were significantly associated with perceived need. In contrast, each of the continuously scored screener scales was significantly associated with perceived need leading to the conclusion that the perception of need is primarily associated with the cumulative burden or severity of the need as indicated by the screeners.

Finally, the committee notes that neither having a mental health care need nor perceiving that one has a need necessarily translates into use of services. Therefore, to identify factors that may influence the use of mental health care services in the future, the committee examined barriers and facilitators that are associated with mental health care service use at present. The committee focused on veterans who have a mental health care need.

BARRIERS AND FACILITATORS TO SERVICE USE

There are numerous types of potential barriers and facilitators to using health care, including VA system factors such as awareness of eligibility for services, understanding how VA is organized, access factors (for example, the distance to services, the ease of getting appointments, and the availability of providers and services), individual factors (for example, opinions about VA health services, attitudes toward mental health treatment, concerns about confiscation of firearms, employment, and other competing personal demands), and combination factors (for example, the perceived availability of services and providers).

This section presents both survey and site visit interview results about barriers and facilitators to service use.

Eligibility Knowledge

Perhaps the first requirements to obtain VA mental health care are having an awareness of its existence and having knowledge about one's eligibility. Unfortunately, many veterans appear to be unaware of both the existence of services and their own eligibility. For example, of the survey respondents who have had a mental health need but did not use VA mental health services, 33 percent reported that they were not aware that VA offered mental health services and 42 percent did not know how to apply for

VA mental health benefits. An additional 30 percent of survey respondents “did not feel they deserved” to receive mental health care from the VA and 40 percent did not think they were “entitled to or eligible for” VA mental health care. These results are shown in Table 6-15. Given how complex the VA eligibility guidelines are, it is quite possible that this complexity contributes to veterans’ uncertainty; see Box 6-1 for a summary of eligibility categories.

The site visit interviews reinforced the supposition that a veteran needs to have a significant amount of information to successfully enroll with the VA, starting with the understanding that he or she is, indeed, a “veteran”:

[It] took me a very, very long time to realize I even qualify as a veteran . . . I considered veterans somebody who had been to combat . . . [Battle Creek, Michigan]

Probably 50 percent of the folks that I talk to that have not come into the VA believe they can’t come unless they’re service-connected, which is not true. [Topeka, Kansas]

The expanded eligibility criteria described earlier in this chapter, which affect veterans serving in combat theaters in support of OEF, OIF, and OND, adds to veterans’ confusion about whether they qualify for services. Many veterans reported a lack of knowledge about the VA and eligibility for services, despite the fact that all service members must attend a Transitional Assistance Program (TAP) before leaving active duty. Interviewees often said that the information about the VA shared at TAP was sparse or non-existent. The following quotes are typical of what site visitors heard:

No one explained to us how to enter the VA system or how to access the health care benefits we had. A group of at least 140 were in my week-long transition class. At no point did we hear that information. [Seattle, Washington]

Similarly, interviewees reported a lack of information about eligibility for services under military sexual trauma (MST) policies:

It’s always been the case that veterans who report MST can be eligible for mental health-related care . . . Some veterans tell me they think only combat veterans can come to the VA or poor veterans. [Charleston, South Carolina]

Yet even if the information were shared, interviewees indicated that TAP classes are at the wrong time for a service member to try to retain critical information about such things as health care eligibility; veterans say they feel overwhelmed. Such “information overload” is even more difficult for individuals with cognitive challenges from PTSD or a TBI.

Transitioning from the military to the VA system is often challenging for veterans who entered the military shortly after high school. Many are on their own and paying rent and bills for the first time, while lacking the camaraderie and identity they just spent years building. A Veterans’ Service Organization staff member summed up the difficult transition in this manner:

You go from mom and dad’s house to the military . . . get out after 4 years . . . without somebody providing you structure . . . I always say, “The VA is not your NCO [non-commissioned officer]. They’re not going to give you that structure.” . . . A lot of them have what I call culture shock. [Battle Creek, Michigan]

A veteran offered a similar perspective, saying, “It’s been my experience with the VA that they stand up and say, ‘We’re here to help you . . . but you’ve got to navigate the maze.’” [El Paso, Texas]

During the site visits, veterans also reported frustration with inconsistent information or misinformation about VA eligibility. One caregiver of a veteran in Charleston, South Carolina, said, “He’s gone to

the VA in Columbia. He's gone to the VA in Salisbury. He's hitting different VAs, and they're all telling him different things." Similarly, another caregiver in San Diego, California, said, "She was just trying to get her VA ID card . . . Every time she called, she was given different information, even though she was asking the same question." The caregiver added, "How do you have confidence in a system that can't get you consistent information?"

Understanding the Veterans Health Administration and the Veterans Benefits Administration

Understanding how various benefits and services are organized within the VA system is a major hurdle for many veterans seeking VA care. Across all the sites visited, veterans conveyed confusion about the differences between the VBA and the Veterans Health Administration (VHA), two operating components of the VA. Most veterans appeared to understand that they need to go through VBA's disability compensation process to document their service-connected disabilities. Many veterans, however, incorrectly assumed that this process, which involves medical assessments by VA clinicians, sets them up for health care through the VA. These veterans are unaware that enrollment in the VHA is a completely separate process, and they are often waiting in vain for someone to contact them about mental health appointments.

Some VA medical centers (VAMCs) are making an effort to reduce the confusion between VHA and VBA services. For example, because many veterans apply for disability, but never enroll for health care, the Palo Alto VAMC has started a program where staff are notified each time an OEF/OIF/OND veteran in that location goes through a disability examination. A member from the transition team then calls the veteran and works to engage him or her in health care. The VA staff referred to this program as "groundbreaking because they [VBA and VHA] have always maintained that the two systems have to be separate."

A related issue is that if veterans have a negative experience with the disability claims process, they may be turned off from seeking care from the VA because they assume that it will be unsatisfactory. A clinician in Charleston said, "I think the biggest thing is that the veterans get it all confused. They hear one thing about claims not going through, and they think that's how the VA doctors are going to be."

In addition to the confusion between the VHA and VBA, both veterans and staff raised the possibility that disability compensation may be affecting veteran treatment-seeking behavior. For example, in several locations, clinical staff expressed the view that the disability and compensation system incentivizes veterans to be "sick" and to continue to use clinical resources that might better serve someone else.

Some veterans similarly expressed their fears that if they stop getting services or show signs of improvement, they will lose some or all of their disability compensation:

I notice that in order for me to keep my benefits I have to stretch the truth a little bit . . . I'm still struggling, but it's getting better . . . if I lose my percentages, then I lose a lot more benefits that the VA has to offer. [Palo Alto, California]

Interestingly, other VA staff and veterans countered this perspective. Their view was that veterans were *avoiding* care in order to maintain their incomes:

Some people are afraid to go get care from the VA . . . Because if you get better in any way. . . they lower your rate. . . I do my mental health care mainly through the Vet Center because they don't report back to Comp and Pen on everything. [Palo Alto, California]

Many veterans who use VA health care are low income and their disability compensation is financially important to them. As one clinician in Nashville said, “When they call these veterans for a reevaluation, these veterans get desperate . . . afraid they are going to lose their disability payment. For a lot of them, that’s all they have to eat.” From these reports, it seems the disability system can leave many veterans conflicted about how best to proceed in treatment.

The VA’s Veterans Satisfaction Survey (VSS), an annual survey of veterans served by the VA, also asks veterans about mental health services and disability compensation. Veterans are asked to rate the statement, “I believe it is necessary for me to stay in mental health treatment to keep my service connected disability,” on a scale of 1 to 5, where 1 is strongly disagree, 5 is strongly agree, and 3 is neither. For FY 2016,⁵ the VA reported a mean rating of 3.26 (standard deviation = 1.27) among OEF and OIF respondents (VA, 2016). This result and veterans’ perspectives reported in the site visits may suggest a closer examination of veterans’ understanding of disability compensation and treatment-seeking behavior is warranted. See Chapter 15 for details about the VSS.

Veteran Perspectives Regarding Barriers and Facilitators to Service Use

In its survey of veterans, the committee examined barriers and facilitators to VA service use for three groups of veterans who have a mental health care need. Each user group reported on various topics:

Among users of VA mental health services

- Reasons for using VA services
- Experiences with the VA

Among non-users of VA mental health services

- Reasons for not using VA services

Among all veterans who have a mental health need

- Ease of use
- Availability of mental health services
- Obstacles to obtaining services
- Attitudes about mental health treatment

Users’ Perspectives

The survey asked VA users of mental health services who have a mental health need about the reasons they use VA mental health services. Table 6-14 summarizes these reasons. The most frequently endorsed reasons for using the VA were the provision of prescription benefits (87 percent), entitlement to services (85 percent), and lower cost (83 percent). About three-quarters of the users indicated that getting care for a service-connected disability was a reason for using the VA. Other reasons for using the VA among veterans who have a mental health need included the convenience of the VA location (68 percent), liking the VA doctors or already using the VA for years (64 percent), and the VA being

⁵The FY 2016 report reviewed by the committee covers survey data collected through June 2016.

TABLE 6-14 Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Use VA Services, the Percentage Who Strongly or Somewhat Agree with Reasons for Using VA Services

Reasons Veterans Use VA Mental Health Services	Unweighted n	Weighted N	Weighted % Agree	Standard Error %
Total	849	476,654	-	-
VA provides prescription benefits	732	413,337	86.7%	1.4%
You are entitled to it	724	404,614	84.9%	1.4%
VA costs less than other options for care	702	396,222	83.1%	1.5%
Can get care for a service-connected disability	649	356,734	74.8%	1.9%
VA location is convenient	581	322,712	67.7%	1.9%
You like the doctors at the VA or have been going for years	548	306,095	64.2%	2.0%
VA is the only source of mental health care available	522	303,496	63.7%	1.8%
Spouse or friends suggested you get care at the VA	448	265,517	55.7%	1.9%
VA provides services cannot get elsewhere	390	231,985	48.7%	1.8%
VA provides a higher quality of care	401	220,917	46.3%	1.9%
Lost or had inadequate private health insurance	337	200,252	42.0%	1.9%

NOTE: Weighted % agree includes responses of strongly and somewhat agree.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

the only available source of mental health care (64 percent). The last reason is consistent with the fact that 42 percent of the veterans reported having lost insurance coverage or having inadequate levels of coverage as their reason for using the VA. Slightly less than half (49 percent) sought care at the VA because the VA provides services that they could not get elsewhere. The belief that the VA provides higher quality care also motivated 46 percent of veterans. These latter two findings are consistent with a theme found in the qualitative interviews, discussed in later chapters, that many veterans believe that the mental health professionals at the VA are familiar with veteran issues.

Non-Users' Perspectives

The survey also asked those who have a mental health need but do not use VA mental health services what their reasons were for not using services. Table 6-15 summarizes the responses and shows that the most commonly cited reasons for not using the VA were a lack of knowledge about how to apply for benefits (42 percent) and the belief by the veteran that he or she was not eligible or entitled to services (40 percent). In addition, about one-third of veterans who had a mental health need indicated they do not use the VA because they were not aware that the VA offers mental health services (33 percent) and a similar percentage (30 percent) did not feel they deserved to receive mental health care benefits from the VA. Taken together, these responses suggest that enhancements in the VA's outreach strategies are needed, even though all service members go through the TAP before separation. TAP includes a 6-hour module on VA benefits. Notably, 30 percent do not trust the VA, 23 percent had a bad prior experience at the VA, and 19 percent indicated they do not feel welcome at the VA.

All Veterans Who Have a Mental Health Need

Access to Care and Ease of Use

The committee's survey explored how easy it is for veterans to use the VA in terms of location and transportation, access to timely appointments, the availability of providers and services, specific

TABLE 6-15 Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Do Not Use VA Services (Users of Non-VA Services and Non-Users of Any Mental Health Services), the Percentage Who Agreed with Various Reasons for Not Using Services

Reasons Veterans Do Not Use VA Mental Health Services	Unweighted n	Weighted N	Weighted % Yes	Standard Error %
Total	1,146	1,214,303	-	-
Do not know how to apply for VA mental health care benefits	411	506,957	41.7%	1.3%
Do not believe entitled or eligible for VA mental health care benefits	357	479,555	39.5%	1.8%
Not aware VA offers mental health care benefits	314	401,674	33.1%	1.7%
Use other sources of mental health care	361	399,701	32.9%	1.6%
Do not need care	338	384,146	31.6%	1.6%
Feel do not deserve to receive mental health care benefits from the VA	282	358,479	29.5%	1.4%
Do not trust the VA	360	357,804	29.5%	1.9%
Some other reason	327	318,751	26.2%	1.5%
Had a bad prior experience at VA	300	276,663	22.8%	1.3%
Do not feel welcome at the VA	223	225,174	18.5%	1.3%
Do not want assistance from the VA	203	207,205	17.1%	1.0%

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

obstacles to getting care, and attitudes about getting mental health treatment. Table 6-16 shows accessibility (measured as travel distance, travel time, and ease of transport) to the nearest VA facility that offers mental health service among veterans who screen positive for a mental health need and use mental health services. In general, the majority of veterans who had a mental health need and used the VA did not consider the location of and transportation to the VA for mental health services to be barriers. However, among those screening positive who used mental health services but not the VA (non-VA users), the location may be a barrier. Seventy-three percent of VA users who had a mental health need reported that they live within 30 miles of a VA facility that offers mental health services; among non-VA users who had a mental health need, only 45 percent reported living within 30 miles from a VA facility with mental health services. Not surprisingly, among those veterans who had a mental health need, a much larger percentage of non-VA users than VA users (28 versus 3 percent) were unsure of the location of the nearest facility, but after restricting attention to those who specified a distance, 75 percent of VA users with a mental health need reported that they live within 30 miles of a VA facility that offers mental health services; among non-VA users with a mental health need, only 64 percent reported living within 30 miles of a VA facility with mental health services.

Among VA users with a mental health need, Table 6-16 shows, 76 percent indicated that they live 45 minutes or less from a VA facility; only 44 percent among non-VA users with a mental health need reported living 45 minutes or less from a VA facility. This is a statistically significant difference, and this may be one of the reasons some veterans do not use mental health services at the VA even though they have a need. Note that non-VA users with a mental health need were often unsure about the travel time to the nearest VA facility (33 versus 3 percent for VA users with a mental health need), but differences persist after restricting attention to those who specified a time: 78 percent of VA users with a mental health need reported living 45 minutes or less from such a facility, versus 66 percent for non-VA users with a mental health need. Overall, 75 percent of the veterans with a mental health need who used VA

TABLE 6-16 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Geographic Accessibility to the Nearest VA Facility That Offers Mental Health Services

Geographic Accessibility to VA Facility	All OEF/OIF/OND Veterans				VA Users				Non-VA Users*			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Distance from VA facility												
0-10 miles	482	357,662	21.0%	1.1%	274	153,011	32.1%	2.1%	45	43,621	16.0%	2.4%
11-20 miles	464	366,666	21.6%	1.0%	219	121,548	25.5%	1.7%	47	48,411	17.7%	2.4%
21-30 miles	272	202,208	11.9%	0.7%	139	74,406	15.6%	1.2%	33	29,889	11.0%	2.3%
31-40 miles	145	112,004	6.6%	0.7%	70	40,650	8.5%	1.2%	23	21,595	7.9%	1.8%
41-50 miles	123	102,664	6.0%	0.6%	53	31,489	6.6%	1.0%	16	18,604	6.8%	1.5%
>50 miles	230	208,362	12.3%	0.8%	72	42,684	9.0%	1.3%	26	30,129	11.0%	2.0%
Not sure	276	335,965	19.8%	0.9%	21	12,463	2.6%	0.7%	64	77,473	28.4%	2.8%
Missing	11	14,136	0.8%	0.2%	1	402	0.1%	0.1%	2	3,078	1.1%	0.8%
Time to VA facility												
<10 minutes	174	133,386	7.8%	0.7%	93	54,522	11.4%	1.4%	15	11,666	4.3%	1.5%
10-20 minutes	415	303,647	17.9%	1.0%	233	128,657	27.0%	2.0%	37	42,673	15.6%	2.3%
21-30 minutes	335	246,356	14.5%	0.9%	177	93,561	19.6%	1.4%	34	28,832	10.6%	2.3%
31-45 minutes	297	227,472	13.4%	0.8%	148	84,999	17.8%	1.5%	36	35,385	13.0%	2.6%
46-60 minutes	205	163,924	9.6%	0.7%	91	52,441	11.0%	1.3%	28	24,021	8.8%	1.9%
>1 hour	260	232,297	13.7%	0.9%	83	47,773	10.0%	1.3%	34	38,255	14.0%	2.6%
Not sure	303	378,321	22.3%	1.0%	19	12,172	2.6%	0.7%	70	88,890	32.6%	3.5%
Missing	14	14,265	0.8%	0.2%	5	2,530	0.5%	0.3%	2	3,078	1.1%	0.8%
Ease of transport to the VA												
Very easy/Somewhat easy/Neither easy nor hard	1,281	989,867	58.2%	1.1%	641	357,353	75.0%	1.7%	134	134,654	49.4%	2.9%
Very hard/Somewhat hard	290	244,868	14.4%	0.9%	127	78,166	16.4%	1.6%	45	47,073	17.3%	2.1%
Not sure	418	450,580	26.5%	1.1%	76	38,516	8.1%	1.0%	75	87,994	32.3%	2.9%
Missing	14	14,353	0.8%	0.2%	5	2,618	0.5%	0.3%	2	3,078	1.1%	0.8%

NOTES: Responses may not sum to 100% due to rounding. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.
 *:"Non-VA user" denotes veterans who receive mental health services but not at a VA facility.
 SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

mental health services (or 82 percent adjusted for not sure and missing) reported that it is very easy, somewhat easy, or neither easy nor hard to get to the nearest VA facility with mental health services; among non-VA users with a mental health need, only 49 percent (or 74 percent after adjustment) reported the same ease of access. Though transportation may not be an issue for the majority of veterans with a mental health need, a noteworthy minority indicated that they were located a considerable distance from the nearest VA offering mental health care. For 9 percent of VA users with a mental health need (9 percent after adjustment) and 11 percent of non-VA users with a mental health need (16 percent after adjustment), the nearest facility with mental health services was more than 50 miles away, and 10 percent of VA users with a mental health need (10 percent after adjustment) and 14 percent of non-VA users with a mental health need (21 percent after adjustment) indicated that they lived more than 1 hour from such a facility.

While the majority of veterans surveyed live reasonably close to the nearest VA facility offering mental health care, the committee found on its site visits that transportation can be a significant challenge and a barrier for veterans in rural locations. In some locations veterans reported travel times of more than an hour to reach needed services. Among veterans who rely on public transportation in rural locations, seeking services and returning home can take an entire day.

Financial distress experienced by many veterans can result in an inability to pay for gas for the trip, ownership of an unreliable vehicle or lack of a vehicle, or a lack of affordable or reliable public transportation. As one VA clinician in Battle Creek, Michigan, bluntly said, “There’s a natural assumption that all these veterans have drivers licenses, they have money for gas, and they have their own vehicle. They don’t.”

Many sites reported that Disabled American Veterans (DAV) runs vans to assist veterans with getting to the VA for appointments. Although this was praised as a great service, it is still difficult for many veterans to use because it often requires them to spend an entire day traveling to and from an appointment since the vans run one route in and one route out each day. Additionally, DAV requires telephone confirmation the day before, something that is challenging for veterans without consistent phone access or the ability to afford cell phone minutes.

Further complicating the transportation options are the symptoms of PTSD themselves. VA clinicians noted that those who are apprehensive about being in crowded places have a hard time using public transportation even if it is otherwise a viable option. They also noted that many veterans suffering from PTSD are nervous drivers, and many veterans commented that their anger management issues lead to road rage, making it hard to safely drive long distances. One veteran said, “A lot of OIF veterans and OEF veterans aren’t really happy about driving. With all the roadside bombs and stuff, I think it made a lot of paranoid drivers” [Topeka, Kansas]. Many mental health care service recipients also deal with multiple comorbidities, including chronic pain, adding additional barriers to making long drives. As discussed below in the section on factors that may influence future use, the committee’s survey showed that the farther a veteran resides from a VA facility offering mental health services, the odds they use services decreases despite having a mental health care need (see Table 6-38). This suggests that further expanding telemedicine options to rural-dwelling veterans may improve access for those who see distance to the nearest mental health facility as a barrier to their care. Overall, about half of the veterans in the survey said they would be willing to receive Internet-delivered mental health care in the future (see Table 6-35).

Veterans also reported issues with the process of getting mental health care, ease of getting appointments, the availability of staff to answer questions, and the time between requests and actual appointments. Table 6-17 shows ratings for access to mental health care and for the availability of mental health care among veterans who screen positive for a mental health need and who use the VA for mental health

TABLE 6-17 Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Use VA Mental Health Services (an estimated 476,654 veterans), Attitudes on Access to Care and Availability of Mental Health Care

Ease of Access to VA Mental Health Care	Unweighted n	Weighted N	Weighted %	SE %
Process of getting mental health care				
Very or somewhat burdensome	457	258,287	54.2%	1.8%
Not very or at all burdensome	353	192,381	40.4%	1.8%
Not sure	34	23,703	5.0%	1.1%
Easy to get appointment				
Never or sometimes	366	203,084	42.6%	2.0%
Always or usually	410	233,211	48.9%	2.1%
Have not tried	61	35,263	7.4%	1.1%
Not sure	8	4,068	.9%	0.3%
Evening/weekend/holiday care available				
Never or sometimes	271	154,680	35.4% ^a	1.8%
Always or usually	129	75,317	17.2% ^a	1.5%
Have not tried	374	205,445	47.0% ^a	1.8%
Time between request and appointment				
Very or somewhat dissatisfied	260	146,684	33.6% ^b	1.9%
Very or somewhat satisfied	506	284,621	65.1% ^b	1.9%
Availability of VA personnel to answer questions by phone				
Very or somewhat dissatisfied	214	117,793	24.7%	1.6%
Very or somewhat satisfied	387	216,132	45.3%	1.8%
Does not apply	229	132,513	27.8%	2.0%
Availability of VA personnel to answer questions in person				
Very or somewhat dissatisfied	139	82,076	17.2%	1.5%
Very or somewhat satisfied	642	360,390	75.6%	1.5%
Does not apply	46	23,063	4.8%	0.8%

NOTES: Individual item counts may not sum to total counts due to item non-response. SE = standard error of percentage.

^aPercentage among those estimated 436,969 veterans who had tried to get an appointment with a VA mental health provider in the past 24 months.

^bPercentage among those estimated 431,305 veterans who answered the question.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

services. Despite the convenient location for many, among those who responded, only 40 percent of VA users with a mental health need indicated that obtaining mental health care through the VA was not very or not at all burdensome. Among responding VA users with a mental health need who had tried to obtain an appointment in the last 24 months, only about half (49 percent) indicated it was always or usually easy to get an appointment. Of VA users (N = 435,442) with a mental health need who responded to the question about availability of care during evenings and weekends, only 17 percent of them indicated that they could always or usually get an appointment. Of VA users (N = 431,305) with a mental health need who responded to the question about the time between the request and an appointment, 65 percent of them indicated that they were very or somewhat satisfied with the time between request and appointment for mental health services. Only 45 percent of VA users with a mental health need reported that

they were satisfied with the availability of VA personnel to answer questions by phone. Overall, the table shows, a large proportion of veterans reported difficulty getting convenient and timely appointments for their mental health needs.

Availability of Mental Health Providers and Specific Mental Health Services

The survey also inquired about the availability of a range of VA mental health providers and services. These results are shown in Table 6-18 for VA users who have a mental health need. Just over half of veterans who use VA services (52 percent) were satisfied with the availability of psychiatrists. This is significantly larger than the proportion who reported being very or somewhat dissatisfied (24 percent) or who had no opinion (23 percent). Similarly, a significantly larger proportion (46 percent) of respondents were satisfied with the availability of psychologists and of nurse practitioners when compared with those who were dissatisfied or had no opinion. The large proportion of veterans with mental health needs who use the VA but had no opinion about availability of social workers, addiction counselors, or chaplain/pastoral care suggests that these veterans did not seek those services or that these services were not available in the veterans' specific VA facilities.

Table 6-18 also shows that 40 percent of veterans with a mental health need were satisfied with the availability of specialized mental health services. However, the proportion who was dissatisfied was only 28 percent, meaning that among respondents with an opinion, the proportion of veterans who are satisfied with their access to specialized mental health care is 1.4 times higher than those who are not satisfied. In every type of services rated, among veterans who responded, a significant percentage were satisfied or very satisfied with availability of the service. In the case of medication management, respondents were 2.4 times more likely to be satisfied than not satisfied. Table 6-19 shows the responses of VA users with a mental health need when asked to rate five different aspects of the VA's delivery of mental health services. Seventy to 84 percent of veterans in this category responded to the questions. Among those who responded, the overwhelming majority had a somewhat or very positive opinion about those particular aspects of mental health care. The only exception was the availability of needed services, about which only 43 percent of respondents had a somewhat or very positive opinion. Over 60 percent of respondents had a somewhat or very positive opinion of the way the VA maintained the confidentiality of patient records and of the VA staff's courtesy and respect toward patients. This finding somewhat contradicts some of the comments that were offered during the site visits regarding staff attitudes toward patients (see Chapter 10). On the whole, however, veterans with a need who use the VA mental health services appear to be satisfied with these aspects of service delivery.

Predictors of Access to Care

Because access to care is such a crucial component of the quality of care and because studies have identified significant difficulties for veterans in this area, the committee used the survey data to conduct logistic regression analyses to identify predictors of difficulties accessing care, including the availability of mental health providers and services. The committee was especially interested in race/ethnicity and gender as potential predictors, but it included other veteran characteristics as potential predictors as well. These included age, marital status, employment status, the branch of service, deployment time, and combat exposure. Refer to Table 6-10 above for a list of the core independent variables used in the regression models, including the reference categories for those variables. In addition, the regressions in this section (and in Factors That May Influence Future Use below) use several additional variables, described in Table 6-20, that assess potential attitudes and beliefs that may pose barriers to treatment

TABLE 6-18 Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Used VA Mental Health Services Satisfaction with Availability of Mental Health Providers and Services at the VA

Availability of Providers and Services	Very or Somewhat Satisfied			Very or Somewhat Dissatisfied			No Opinion					
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Satisfaction with Mental Health Provider Availability For:												
Psychiatrist	444	246,018	51.6%	1.9%	201	113,166	23.7%	1.8%	193	111,812	23.5%	1.8%
Psychologist	396	219,136	46.0%	1.8%	175	99,452	20.9%	1.7%	267	152,594	32.0%	1.8%
Social workers	305	169,104	35.5%	1.9%	134	73,217	15.4%	1.4%	385	222,176	46.6%	1.9%
Nurse practitioners	419	230,232	48.3%	1.8%	116	68,893	14.5%	1.4%	296	168,062	35.3%	2.0%
Addictions counselors	105	61,420	12.9%	1.1%	45	29,359	6.2%	1.0%	672	373,365	78.3%	1.5%
Chaplain services/Pastoral care	101	59,039	12.4%	1.2%	31	18,073	3.8%	0.8%	685	381,784	80.1%	1.5%
Satisfaction with health care services availability for:												
Primary care services	496	284,033	59.6%	1.8%	285	153,046	32.1%	1.8%	2	475	0.1%	0.1%
General mental health services	526	296,672	62.2%	1.9%	240	136,297	28.6%	1.8%	1	379	0.1%	0.1%
Specialized mental health care services	351	189,121	39.7%	2.0%	224	131,262	27.5%	1.6%	5	2,935	0.6%	0.3%
Satisfaction with mental health services availability for:												
Medication management	482	267,108	56.0%	2.1%	195	112,157	23.5%	1.7%	1	538	0.1%	0.1%
Psychotherapy (talk therapy)	344	187,708	39.4%	1.5%	168	98,300	20.6%	1.6%	8	4,163	0.9%	0.4%
Group therapy	173	100,104	21.0%	1.6%	102	59,725	12.5%	1.3%	14	6,318	1.3%	0.4%
Emergency services (e.g., crisis hotline and other 24-hour services)	204	116,747	24.5%	1.7%	108	63,758	13.4%	1.4%	11	5,468	1.1%	0.4%
Case management	270	149,124	31.3%	1.6%	146	88,589	18.6%	1.6%	13	5,970	1.3%	0.4%

NOTES: Responses may not sum to 100% due to rounding or due to the omission of the percentages of missing or refused in the table. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-19 Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Used VA Mental Health Services by Opinion Rating with Aspects of VA Mental Health Care

Aspects of VA Mental Health Care	Very or Somewhat Negative			Somewhat or Very Positive			Refused or Missing			Total						
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Availability of needed services	279	161,822	33.9%	1.7%	363	203,751	42.7%	1.6%	207	111,081	23.3%	1.5%	207	111,081	23.3%	1.5%
Privacy and confidentiality of medical records	88	49,209	10.3%	1.1%	549	306,577	64.3%	1.9%	211	120,597	25.3%	1.9%	211	120,597	25.3%	1.9%
Ease of using VA mental health care	239	140,221	29.4%	1.9%	428	236,069	49.5%	2.0%	181	100,093	21.0%	1.8%	181	100,093	21.0%	1.8%
Mental health care staff's skill and expertise	160	92,679	19.4%	1.5%	468	261,843	54.9%	1.9%	221	122,132	25.6%	2.3%	221	122,132	25.6%	2.3%
Staff's courtesy and respect towards patients	140	78,043	16.4%	1.5%	569	319,881	67.1%	2.0%	140	78,731	16.5%	1.9%	140	78,731	16.5%	1.9%

NOTE: SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.
 SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-20 Additional Independent Variables Included in the Regression Models

Variable	Description	Unavailable n
Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH)	Sum of 10 items such as “If I believed I was having a mental breakdown, my first inclination would be to get professional attention” and “The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.”	2,077
Stigma	Sum of nine items, such as “It could harm my career” and “My coworkers would have less confidence in me if they found out.”	2,210
Barriers	Sum of two items: “It would be difficult to get childcare or time off of work” and “Mental health care would cost too much money.”	2,117
Encouraged to get help	No one (reference), Relative or friend encouraged respondent to get help	2,077
Distance to VA facility	0–10 miles (reference), 11–20 miles, 21–30 miles, 31–40 miles, 41–50 miles, more than 50 miles	2,314
Time to VA facility	Less than 10 minutes (reference), 10–20 minutes, 21–30 minutes, 31–45 minutes, 46–60 minutes, more than 1 hour	2,349

NOTE: Unavailable n includes responses of don’t know, refused, missing, and those who were never asked the question.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

seeking. The variables Distance to VA and Time to VA are not used simultaneously in any models in order to avoid collinearity issues. Only the independent variables that were statistically significant at the bivariate, or the full-model stage, were included in the final model.

Four responses to accessing mental health care survey items were selected as dependent variables for logistic regression analysis: (1) The process for getting mental health care through the VA is very or somewhat burdensome; (2) In the past 24 months it was never easy to get appointments with VA mental health providers; (3) In the past 24 months I was never able to get mental health care from a VA facility during evenings, weekends or holidays; and (4) During the past 24 months I was very or somewhat dissatisfied with the time between requesting a VA appointment for mental health care and the actual appointment date. In addition, to examine predictors of veterans’ satisfaction with availability of services and providers, three composite variables were created using linear regression as these composites were continuous variables. The first composite included satisfaction with the availability of primary care, general mental health services, and specialized mental health services. The second included satisfaction with the availability of psychiatrists, psychologists, social workers, nurse practitioners, addiction counselors, and chaplains or pastoral counselors. The third included satisfaction with the availability of medication management, psychotherapy, group therapy, emergency services, and case management.

Results showing odds ratios and the corresponding lower and upper bounds of the confidence intervals of statistically significant predictors are presented in Tables 6-21 through 6-24. Gender did not significantly predict any of the four access variables, suggesting that these aspects of access to care did not differ for men and women. Statistically significant effects for race indicated that veterans who are Hispanic and American Indians or Alaska Natives were more likely to report that they were dissatisfied with the period of time between their request for an appointment at the VA and the appointment date (see Table 6-24). It should be noted, however, that American Indian or Alaskan Native race may be confounded with living in a rural area, which may be associated with dissatisfaction with access to care. Other variables significantly associated with dissatisfaction with time to appointment were never having been married or being divorced, having an associate’s or bachelor’s degree, being an officer, having to travel more than an hour to a VA facility, and perceived need. Generally, variables that predicted only one measure of satisfaction with access to care should be used only if they are replicated in other

TABLE 6-21 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That the Process of Obtaining Mental Health Care Through the VA is Very/Somewhat Burdensome (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL	Standard Error
Age	50+ years old	0.379**	0.213	0.675	0.292
Insured	Insured	2.094**	1.327	3.305	0.231
PTSD score	Continuous	1.168*	1.016	1.342	0.071
ATSPPH	Continuous	0.952*	0.915	0.990	0.020
Barriers score	Continuous	1.608**	1.192	2.168	0.152
Encouraged to get help	Continuous	0.543*	0.320	0.921	0.268
Disability rating	Disability less than 50 percent	0.479*	0.262	0.875	0.305
Disability rating	Disability 50 percent or higher	0.418**	0.276	0.633	0.211

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

2,007 unweighted cases initially available, 621 unweighted cases excluded due to missing responses.

Model includes 1,386 unweighted cases representing weighted N of 1,062,004.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

studies, whereas variables that predicted multiple measures are likely to be more reliable and consistent indicators of veteran-perceived satisfaction with access to care. Not surprisingly, the most consistent predictor of access to care was reported barriers to care. Veterans who reported more barriers to care were more likely to report difficulties and dissatisfaction with access to care (see Tables 6-21 and 6-24). Depression scores significantly predicted three of the four access variables (see Tables 6-22, 6-23, and 6-24) and PTSD predicted one (see Table 6-21). Veterans with higher depression or PTSD levels were more likely to report access difficulties. Veterans with a high score on the DRRRI combat scale report that it is never easy to get appointments with a VA mental health provider (see Table 6-22). Veterans with insurance are more likely to report that the process of obtaining care through the VA is burdensome (Table 6-21). Other variables that significantly predicted at least one measure of access included age, score on the Attitudes Toward Seeking Professional Psychological Help (ATSPPH), having been encouraged to get help, disability rating, and deployment time.

TABLE 6-22 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That It Is Never Easy to Get Appointments with a VA Mental Health Provider (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL	Standard Error
Deployment time	More than 48 months	0.199*	0.051	0.771	0.687
DRRRI combat	High	2.716*	1.178	6.259	0.423
Depression score	Continuous	1.315**	1.170	1.476	0.059
Encouraged to get help	Continuous	0.482*	0.265	0.876	0.303
Disability rating	Disability 50 percent or higher	0.347**	0.174	0.695	0.352

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

Respondents who had not tried to get an appointment with a VA mental health provider in the past 24 months were excluded.

1,060 unweighted cases initially available, 288 unweighted cases excluded due to missing responses.

Model includes 772 unweighted cases representing weighted N of 485,150.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-23 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That They Are Never Able to Get VA Mental Health Care on Evenings, Weekends, or Holidays (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL	Standard Error
Deployment time	7–12 months	0.427*	0.194	0.938	0.400
Deployment time	25–36 months	0.381*	0.160	0.908	0.440
Depression score	Continuous	1.192**	1.055	1.348	0.062
ATSPPH	Continuous	0.949*	0.903	0.997	0.025

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

Respondents who had not tried to get a mental health care appointment at the VA during evenings, weekends, or holidays in the past 24 months were excluded.

542 unweighted cases initially available, 162 unweighted cases excluded due to missing responses.

Model includes 380 unweighted cases representing weighted N of 250,393.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

ATSPPH = Attitudes Toward Seeking Professional Psychological Help scale.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

The results of the linear regression analyses of veterans' satisfaction with the availability of VA mental health providers and services are summarized in Tables 6-25 through 6-27. Neither race nor gender significantly predicted satisfaction with the availability of mental health services or providers. However, depression, PTSD, and barriers to care were all consistently associated with lower satisfaction with the availability of VA mental health services. That is, veterans with higher levels of depression or PTSD and those who reported more barriers to care were less satisfied with availability of VA mental

TABLE 6-24 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Responding That They Are Somewhat/Very Dissatisfied with Period of Time from VA Appointment Request to Appointment Date (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL	Standard Error
Age	50+ years old	0.293*	0.106	0.810	0.516
Marital status	Never married	1.907*	1.035	3.514	0.310
Marital status	No longer married	1.694*	1.031	2.782	0.252
Education	Associate's or Bachelor's degree	1.948*	1.032	3.677	0.322
Race	American Indian/Alaska Native	5.093*	1.427	18.182	0.645
Race	Hispanic	1.766*	1.034	3.016	0.271
Rank	Officers	2.605*	1.067	6.361	0.453
Depression score	Continuous	1.120*	1.017	1.235	0.049
Barriers score	Continuous	1.756**	1.272	2.425	0.164
Time to VA facility	More than 1 hour	2.268*	1.139	4.516	0.349
Perceived need	Yes	1.855**	1.246	2.761	0.202

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

Respondents who had not tried to get an appointment with a VA mental health provider in the past 24 months were excluded.

1,060 unweighted cases initially available, 307 unweighted cases excluded due to missing responses.

Model includes 753 unweighted cases representing weighted N of 472,271.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-25 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Statistically Significant Predictors of Higher Satisfaction with Availability of Primary Care, General Mental Health, and Specialized Mental Health Services at the VA

Variable	Variable Value	Estimate	Standard Error	t-score	p-value
PTSD score	Continuous	-0.088**	0.026	-3.374	0.001
Drug dependence score	Continuous	-0.055*	0.026	-2.114	0.036
Depression score	Continuous	-0.082**	0.027	-3.039	0.003
ATSPPH	Continuous	0.020**	0.007	2.718	0.007
Barriers score	Continuous	-0.212**	0.046	-4.608	0.000
Disability rating	Disability 50 percent or higher	0.288*	0.131	2.197	0.029

NOTES: * $p < .05$; ** $p < .01$. ATSPPH = Attitudes Toward Seeking Professional Psychological Help scale.

Responses of no opinion were excluded.

1,435 unweighted cases initially available, 335 unweighted cases excluded due to missing responses.

Model includes 1,100 unweighted cases representing weighted N of 733,848.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-26 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Statistically Significant Predictors of Higher Satisfaction with Availability of Mental Health Providers at the VA

Variable	Variable Value	Estimate	Standard Error	t-score	p-value
Depression score	Continuous	-0.106**	0.021	-5.128	0.000
ATSPPH	Continuous	0.031**	0.008	3.944	0.000
Barriers score	Continuous	-0.143*	0.059	-2.436	0.016

NOTES: * $p < .05$; ** $p < .01$. ATSPPH = Attitudes Toward Seeking Professional Psychological Help scale.

Responses of no opinion were excluded.

1,121 unweighted cases initially available, 270 unweighted cases excluded due to missing responses.

Model includes 851 unweighted cases representing weighted N of 533,652.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-27 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Statistically Significant Predictors of Higher Satisfaction with Availability of Mental Health Services at the VA (medication management, psychotherapy, group therapy, emergency services, case management)

Variable	Variable Value	Estimate	Standard Error	t-score	p-value
Insured	Insured	-0.262**	0.091	-2.859	0.005
PTSD score	Continuous	-0.081*	0.038	-2.105	0.037
Depression score	Continuous	-0.092**	0.025	-3.634	0.000
ATSPPH	Continuous	0.038**	0.008	4.853	0.000
Barriers score	Continuous	-0.229**	0.057	-4.019	0.000

NOTES: * $p < .05$; ** $p < .01$. ATSPPH = Attitudes Toward Seeking Professional Psychological Help scale.

Responses of no opinion were excluded.

1,089 unweighted cases initially available, 256 unweighted cases excluded due to missing responses.

Model includes 833 unweighted cases representing weighted N of 519,440.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

The results of the linear regression analyses of veterans' satisfaction with the availability of VA mental health providers and services are summarized in Tables 6-25 through 6-27. Neither race nor gender significantly predicted satisfaction with the availability of mental health services or providers. However, depression, PTSD, and barriers to care were all consistently associated with lower satisfaction with the availability of VA mental health services. That is, veterans with higher levels of depression or PTSD and those who reported more barriers to care were less satisfied with availability of VA mental health services. In contrast, those with more favorable attitudes toward getting help were more satisfied with the availability of mental health services.

BARRIERS: INDIVIDUAL FACTORS

There are many aspects of life that can influence a veteran's use of the VA and which affect his or her health care-seeking behavior. The committee's research, both the survey and the site visit interviews, revealed some of these more personal factors—obstacles reported, attitudes toward mental health care, firearm ownership, employment concerns, and other competing demands—which are characteristic of a veteran's life, and, as the committee's research shows, can influence treatment-seeking behavior.

The survey explores barriers to care by asking respondents directly about potential obstacles to getting care. Table 6-28 presents the percentage of veterans with a mental health need who agree with statements regarding obstacles to getting mental health care. Most of the items in Table 6-28 relate to stigma; the two exceptions are "Would be difficult to get childcare or time off work" and "Mental health care would cost too much money." The two obstacles cited by the greatest number of veterans were being denied security clearance (N = 557,000) and mental health care costing too much money (N = 533,000). It should be noted, however, that several of the items included "not applicable" as a response option. For items with a "not applicable" response option, Table 6-28 shows results calculated with and without "not applicable" responses in the total N.

Veterans' attitudes toward the effectiveness of mental health treatment and seeking professional mental health care may be another barrier to getting help. Table 6-29 shows the attitudes toward receiving psychological treatment among veterans who screen positive for a mental health need. Most who screen positive for a mental health need indicated that they would seek psychological help if they were worried or upset for a long period of time (77 percent). Similarly, 71 percent of veterans who have a mental health need indicated that they would seek professional attention if they believed that they were having a mental breakdown. Additionally, 69 percent strongly or somewhat agreed with the statement that they might want psychological counseling in the future, and 67 percent reported that someone with an emotional problem is not likely to solve it alone, but would with professional help. Though some discomfort with professional help is evident in the almost evenly split response to admiring someone who copes without professional help, overall the veterans indicated an openness toward seeking professional help if they thought that they needed it. At the same time, significant percentages of veterans indicated that they somewhat or strongly disagreed with statements saying they would seek help or that they believed that they could benefit from such help. This skepticism about the personal utility and benefit of mental health treatment could represent a significant barrier to the receipt of services for a significant minority of veterans.

Employment Concerns

A commonly reported concern among veterans is the effects that seeking mental health care may have on their employment. Veterans participating in the survey and site visit interviews expressed

TABLE 6-28 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, the Percentage Reporting Obstacles to Using Mental Health Services

Perceived Obstacles	Total n	Unweighted n	Weighted N	Weighted % Yes	Standard Error %
Total	2,007	2,007	1,705,168	-	-
Could be denied security clearance in the future	2,007	687	556,869	32.7%	1.2%
Mental health care would cost too much money	2,007	616	533,015	31.3%	1.0%
Would be seen weak by others	2,007	585	472,258	27.7%	0.9%
Would think less of myself if I could not handle it on my own	2,007	587	468,625	27.5%	1.1%
Would be too embarrassing	2,007	567	466,744	27.4%	1.1%
Could harm my career	2,007	473	397,254	23.3%	1.2%
<i>[excluding not applicable]</i>	<i>[1,295]</i>			<i>[36.7%]</i>	<i>[1.6%]</i>
Co-worker would have less confidence in me	2,007	461	390,954	22.9%	1.4%
<i>[excluding not applicable]</i>	<i>[1,313]</i>			<i>[35.8%]</i>	<i>[1.6%]</i>
Supervisor may respect me less or treat me differently	2,007	457	378,530	22.2%	1.2%
<i>[excluding not applicable]</i>	<i>[1,313]</i>			<i>[34.8%]</i>	<i>[1.6%]</i>
Personal firearms could be taken away	2,007	425	352,810	20.7%	1.4%
<i>[excluding not applicable]</i>	<i>[1,215]</i>			<i>[34.5%]</i>	<i>[2.0%]</i>
Would be too difficult to get childcare or time off work	2,007	361	303,434	17.8%	1.3%
<i>[excluding not applicable]</i>	<i>[984]</i>			<i>[36.9%]</i>	<i>[2.0%]</i>
Friends and family would respect me less	2,007	345	280,688	16.5%	1.1%
Could lose medical or disability benefits	2,007	143	120,618	7.1%	0.8%
<i>[excluding not applicable]</i>	<i>[1,260]</i>			<i>[11.8%]</i>	<i>[1.3%]</i>
Could lose contact with or custody of my children	2,007	120	102,760	6.0%	0.6%
<i>[excluding not applicable]</i>	<i>[829]</i>			<i>[15.0%]</i>	<i>[1.4%]</i>

NOTES: Percentages do not sum to 100% percent because respondents could mark all that apply. The items for which “not applicable” was a response option, analyses were completed both with and without “not applicable” responses in the total N. SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

concerns that having a documented mental health issue would either cause them to lose their current job, or prevent them from obtaining employment in the future. As shown in Table 6-28 above, among those who indicated the item was applicable to them, 37 percent of the veterans in the committee’s survey who had mental health needs reported that seeking mental health services could harm their careers, 36 percent indicated that seeking care would lead to co-workers having less confidence in them if they found out, and 35 percent indicated that it would result in supervisors losing respect or treating them differently.

A third (33 percent) of the survey respondents who had a mental health need cited fear of being denied a security clearance in the future as an obstacle to seeking care. That finding is consistent with what veterans said in the site visit interviews; in particular, they stated that much of their concern was related to getting jobs in law enforcement, which would require possession of a firearm, or other jobs

TABLE 6-29 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, the Percentage Who Agree or Disagree with Statements About Getting Mental Health Care

Statement About Mental Health Care	Agree			Disagree				
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Total	2,007	1,705,168	-	-	2,007	1,705,168	-	-
I would want to get psychological help if I were worried or upset for a long period of time.	1,570	1,307,513	76.7%	1.7%	335	310,960	18.2%	1.6%
If I believed I was having a mental breakdown, my first inclination would be to get professional attention.	1,448	1,212,405	71.1%	1.3%	471	419,434	24.6%	1.2%
I might want to have psychological counseling in the future.	1,434	1,183,242	69.4%	1.6%	467	430,121	25.2%	1.5%
A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.	1,366	1,139,951	66.9%	1.4%	532	474,621	27.8%	1.3%
If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.	1,304	1,091,558	64.0%	1.4%	591	517,596	30.4%	1.4%
There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.	962	824,517	48.4%	1.7%	930	785,679	46.1%	1.4%
Personal and emotional troubles, like many things, tend to work out by themselves.	705	610,928	35.8%	1.6%	1,203	1,009,860	59.2%	1.5%
Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.	681	595,704	34.9%	1.5%	1,201	1,008,242	59.1%	1.4%
A person should work out his or her own problems; getting psychological counseling would be a last resort.	655	568,940	33.4%	1.3%	1,249	1,050,610	61.6%	1.4%
The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	593	496,963	29.1%	1.2%	1,319	1,127,213	66.1%	1.1%

NOTES: Weighted % agree includes responses of strongly and somewhat agree. Weighted % disagree includes responses of Strongly and Somewhat Disagree. SE = standard error of percentage; Unwgt = unweighted; Wgt = Weighted. Rows may not sum to 100% due to the omission of the percentages of missing or refused in the table. SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

that would require obtaining a security clearance. In addition, individuals still in the Reserves or the National Guard expressed concern that a mental health diagnosis could prematurely end their military careers. (For more details about mental health treatment and access to VA health care among National Guard and Reserve forces serving in Iraq and Afghanistan see IOM, 2013, 2014.)

Similar to the gun ownership issue discussed below, it is difficult to tease out reality from the rumors that circulate in the veteran community. For example, during the committee's site visits, one veteran said that a friend of his was fired from his job as a police officer when the police department found out he had sought care from a VA therapist. And a VA clinician in Washington, DC, said, "I was talking to a veteran this morning who was telling me that their job is beginning to do an investigation around people who have mental health services because of the nature of the job." What is certain is that the concern is keeping some veterans from seeking VA services. As one veteran in East Orange, New Jersey, noted, "I certainly did not want to talk to a mental health professional because if it's in the government's mental health log, somehow, somebody is going to get ahold of that." This issue was the reason some veterans were willing to seek services from Vet Centers and not the VA, since their records are separate and perceived by veterans to be more confidential.

Employment concerns were more salient in certain parts of the country than in others. Trepidation about the loss of security clearances was more relevant in areas of the country with large numbers of government and defense-industry jobs, such as the Washington, DC, and Hampton Roads, Virginia, areas. Veterans spoke about law enforcement implications in many parts of the country, but particularly in southern Texas where Customs and Border Protection is a large employer, especially of veterans.

Competing Demands

Many veterans in the OEF/OIF/OND cohort are working hard to balance jobs, school, and young families. Life's demands leave little time to either acknowledge a mental health issue or, if it is identified, participate in the necessary treatment to address the problem. Data from the committee survey underscore this point: 37 percent of the veterans with mental health needs who indicated the item was applicable to them reported that difficulty getting childcare or time off from work is an obstacle to seeking services (see Table 6-28). Among all veterans with mental health needs, including those who indicated the issue was not applicable to them, 18 percent indicated that finding childcare or getting time off of work was an obstacle to their care.

The committee notes similar concerns from its site visits. Even those who do "worry about their mental health" simply can't find the time to fit in a treatment regimen, as one VA clinician in Biloxi, Mississippi, commented: "They're busy trying to go to school, trying to be married, trying to raise children, so they put themselves on the backburner because they're trying to work and make a living." During the site visits, one veteran in Pennsylvania explained, "I can't take time off work. Nobody pays for time off work." Many of the evidence-based treatments require multiple weeks of regular treatment, and veterans said that taking time off from work for 12 weeks in a row is not possible for them. Additionally, many veterans work variable shifts, making it nearly impossible to schedule the appointments for an entire treatment regimen." One VA clinician in Palo Alto, California, said, "[I]f you can't feed your family, you can't really worry about your mental health."

Those who are in school did not report faring any better. Many commented that they cannot afford to miss their classes. A veteran in Pennsylvania who was interviewed on his campus commented, "[A] class here costs me \$8,000. If I miss 4 days, I'm out of the course. I have to wait 6 weeks to come back through the course again." VA staff noted that the GI Bill is a huge financial asset for OEF/OIF/OND veterans, leading a large number of this cohort of veterans to attend college. Yet veterans used the word

“impossible” to explain the ability to seek mental health treatment and maintain their busy schedules: “It’s impossible to have a job or go to school, and go to these appointments.” [Washington, DC]

Taking care of children is a responsibility that prevents many veterans from seeking care. A related issue among those with mental health needs is that seeking treatment may lead to their losing contact with or custody of their children (15 percent among veterans with mental health needs who indicated this item was applicable to them) (see Table 6-28). Since most VA facilities lack childcare, veterans with children are limited in their treatment options. On the site visit interviews, VA clinicians said that this often disproportionately affects female veterans, some of whom lack the ability to come in for treatment. As a VA clinician in Biloxi, Mississippi, noted, “I’ve had some female veterans who wouldn’t enter treatment because they couldn’t get anyone to watch their child.” Many VA clinicians reported allowing children into appointments if there was no other option, but they noted that what they can achieve in an appointment with a child is limited. Another clinician from Biloxi explained,

I’ve tried to see some veterans with their 2-year-old in the stroller in the office, and it makes it much more challenging. Or if the child’s a little bit older, I’m spelling words because we don’t want to say inappropriate things in front of children.

VA staff interviewees in Seattle reported that they had on-site childcare for veterans to use during their appointments. They reported that they were one of only three VAMCs in the country to have this asset and reported that it was “fabulous.” Many Vet Centers also reported having turned a room into a child-friendly space, with things like coloring books, video games, and TVs. They allow patients to leave their children in these rooms while they have their appointment.

Firearms and Mental Health

Results from the committee’s survey showed that, among those veterans who have a mental health need who indicated the obstacle was applicable to them, 35 percent saw the potential of having their personal firearms taken away as an obstacle to using VA mental health services (see Table 6-28). Among all veterans with mental health needs (including those who indicated the item was not applicable), 21 percent saw this as an obstacle to use VA mental health services. Similarly, interviewees in many site visit locations expressed concern that seeking care and receiving a mental health diagnosis would result in the veteran not being able to own or purchase firearms. This section presents what we heard from veterans. It begins with background information about federal and state firearm laws.

Federal and State Firearm Laws

The Gun Control Act of 1968⁶ prohibits certain categories of people from possessing, shipping, transporting, and receiving firearms and ammunition. Prohibited categories include individuals “adjudicated to be mentally defective,” or who have been committed to a mental institution as well as individuals who are unlawful users or addicts of any controlled substance and persons dishonorably discharged from the U.S. Armed Forces. Merely having a mental health diagnosis or receiving treatment for a mental health condition is not enough on its own to qualify a person as “adjudicated as mentally defective” according to federal law (Liu et al., 2013). The Federal Bureau of Investigations (FBI) manages the National Instant Criminal Background Check System (NICS), which is used to determine the eligibility for gun ownership in the United States.

⁶27 C.F.R. § 478.11.

State laws regarding mental health and gun possession and transfer vary greatly, although many states essentially mirror federal regulations or provide further specifications related to the purchase, possession, transfer, revocation, or restoration of firearms (Simpson, 2007). In addition to federal and state firearm laws, there are gun restrictions under Public Law 110-180 that apply to veterans who receive monetary benefits from the VA and are assigned a fiduciary to manage their finances because they are not able to manage their own affairs (as determined by the VA or a court). These veterans are deemed mentally defective by the VA and reported to NICS and, under federal law, are not permitted to purchase, possess, transfer, or ship a firearm or ammunition (McNiel et al., 2007). As of December 31, 2015, there were 263,492 files on mentally defective veterans referred to the FBI by the VA (Krouse, 2017). Veterans may apply for relief from this designation to possibly restore their right to possess or purchase firearms.

If a veteran is ordered by a state court to be involuntarily committed because he or she poses a danger to himself or herself or to others, the state in which the court resides—not the VA—would submit the veteran’s disqualifying record to the FBI (in accordance with the state law) to be added to NICS. The VA itself has rarely (if ever) submitted a veteran’s record for inclusion in NICS for a mental health or medical diagnosis only (Krouse, 2015).

Gun Laws and Veteran Treatment Seeking

As explained above, under federal and state law a mental health diagnosis absent an involuntary hospitalization or a judicial order does not result in loss of gun ownership rights. Of course, a veteran may not know if treatment seeking might lead to hospitalization or a judicial order; however, in the survey and on the site visits, the committee found that veterans may not have an accurate understanding of how seeking mental health care may affect gun purchase and ownership. The committee’s research suggests that a lack of accurate information can have a negative effect on treatment-seeking behavior:

[My friend] went in to talk to somebody about his [PTSD]. He got a letter [from the VA] If he attempted to purchase firearms after being told he had to surrender them, it constituted some kind of felony and he would be detained. Now he’s like, “Why would I have any of my friends go and tell them that they have any kind of PTSD issues when I was just told I’m going to get arrested for keeping my firearms?” It’s why, when vets get out, a lot of them don’t want to go and talk to the VA. . . . [Altoona, Pennsylvania]

Additionally, many veterans reported that they believed that new laws were going into effect that would limit their ability to own firearms, such as this one reported by a veteran, “I was under the assumption that a law had been passed that if you have mental disorders, you can’t get a weapon” [Altoona, Pennsylvania].

By what veterans conveyed to the interviewers, it is difficult to understand the exact circumstances regarding veteran’s understanding of gun ownership laws and the supposed loss of weapons. As in the examples above, several first-hand accounts indicated that veterans had made assumptions about the VA’s actions, and many other accounts shared with site visitors were secondhand, from “a friend of a friend.” The issue is further complicated by varying state laws.

What is certain is that a loss of weapons is a serious concern for many veterans (especially in rural regions of the country), and this concern constitutes a barrier to seeking care for mental health concerns.

A staff member in Iowa said: “I’ve also had people decline mental health services because they’re afraid that we’ll infringe on their gun rights.”

The VA indicated in communication to the committee that it does not actively provide information to veterans regarding laws surrounding gun ownership and mental illness. The VA does, however, actively promote safe gun ownership and the safe use of guns as part of its suicide prevention strategy, and it has distributed over 3 million gun locks. Furthermore, it disseminates gun safety education materials to at-risk veterans and their families and offers lethal means counseling training for suicide prevention coordinators and other providers (VA, 2017a,d).

FACTORS THAT MAY INFLUENCE FUTURE USE

The committee’s survey of OEF/OIF/OND veterans examined the potential future use of VA mental health services based on the veterans’ responses to hypothetical questions regarding their expected use and their actual current or recent use patterns. Hypothetical questions about future use can reveal attitudes about the VA along various dimensions and are likely to elicit responses that are correlated with actual use. They can also reveal potential differences among various subgroups of veterans that may facilitate our understanding of these various influences. However, the estimates of hypothetical use alone are unlikely to be good predictors of future use. Instead, the current patterns and trends in use behavior are likely to be the best predictors of actual future use. The committee explored both types of measures of future use.

Hypothetical Future Use of the Department of Veterans Affairs Services

The committee first asked all veterans how likely they are to use *any* VA service in the future. Seventy-one percent of veterans indicated that they were somewhat likely, likely, or very likely to use a VA service in the future. The survey then asked if they had a mental health need in the future, how likely they would be to use the VA for mental health services. Thus, this question is conditional on having a potential need and an unspecified time frame in the future. Table 6-30 shows that, under these assumptions, nearly two-thirds (an estimated 2.7 million) of all veterans indicated they were somewhat likely, likely, or very likely to use VA mental health services if they have such a need. This estimate substantially overstates the *actual* current perceived need and use of these services by veterans, as can be seen by comparing the hypothetical responses with the actual behavior shown by veterans, detailed in Table 6-8. In particular, Table 6-8 shows that among those veterans with an assessed mental health need and who have a perceived need (19 percent of all veterans, an estimated 800,000), slightly more

TABLE 6-30 Percentage of OEF/OIF/OND Veterans by Mental Health Need and User Group Who Are Somewhat Likely, Likely, and Very Likely to Use VA Mental Health Services in the Future

Use of VA Mental Health Services	Unweighted n	Weighted N	Weighted % LIKELY	Standard Error %
Need/VA Users (N=473,466)	748	423,600	88.9%	1.1%
Need/Non-VA users (N=269,722)	129	139,524	51.1%	3.1%
Need/Non-users (N=934,323)	595	580,644	61.7%	1.8%
No need, no use (N=2,346,810)	1,332	1,440,543	61.2%	1.2%

NOTE: Weighted % Likely includes responses of Very Likely, Likely, and Somewhat Likely.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

than half of them use any mental health care (about 438,000)—VA or non-VA—and about 70 percent of those veterans use the VA. Therefore, of those who both have and perceive they have a need for care, only 33 percent (about 260,500) use the VA, substantially below the 64 percent who report they would use the VA in the future if they have a mental health need.

Table 6-30 exhibits future use intentions by the current user group. As can be seen, nearly all VA users (89 percent) said that they were at least somewhat likely to use VA mental health services if in need, while only 51 percent of non-VA users and 62 percent of non-users reported they are at least somewhat likely to use the VA in the future if they had a mental health need. Among all veterans (regardless of need and user group), 64 percent (SE 0.8 percent) reported they were at least somewhat likely to use VA mental health services if in need.

Veterans who said they were *not at all likely* to use VA mental health services—even if they were in need at some time in the future—were asked about their reasons. Some important differences by user group can be seen in Table 6-31, which includes all veterans who reported that they were not at all likely to use the VA in the future even if they had a mental health need. More than half (54 percent) of current VA users reported having had a bad experience with the VA, and only slightly fewer (46 to 48 percent) reported having waited too long for an appointment, having used the VA before and not seeing improvement, or that VA doctors or staff did not provide good quality treatment. Among non-VA users, 30 percent reported having had a bad experience with the VA, and 13 percent reported having used the VA before and having not seen improvement. A majority of non-VA users (57 percent), perhaps not surprisingly, are most likely to report a preference for a civilian health provider, an option that is also highly endorsed by those who have a mental health need who do use mental health services (49 percent), and even more so by those with no need and no use (64 percent).

Among veterans who have a mental health need, Table 6-32 presents the factors these veterans offered for being unlikely to use VA mental health services in the future. The most frequently cited reason was that veterans prefer a civilian mental health care provider (61 percent). Other common reasons included waiting too long for an appointment (38 percent) and difficulty reaching facilities (25 percent). Quality of treatment is an issue for 19 percent of veterans.

The survey asked all veterans whether they would like to see certain changes at the VA. Table 6-33 presents the percentages of all veterans by the importance they place on select changes the VA could make. For each proposed change, more than half of veterans indicated that the potential change was very or moderately important. The change they most frequently cited as one they would like the VA to undertake is to make the appointment process easier: 80 percent indicated this change was very or moderately important. This is consistent with the findings discussed earlier regarding barriers. Nearly 78 percent said that they would like better quality services and customer service, and 75 percent would like more available services or facilities. Among the desired changes, the desire for nicer facilities was least frequently endorsed, with 56 percent indicating that this is very or moderately important.

Analyses by user group about whether veterans would like to see certain changes at the VA are presented in Table 6-34. Overall, there are no significant differences by user group in the ratings of the importance of ease of the appointment process, better quality services, and better quality customer service, but there are some modest differences between VA users and non-users on the other three variables: VA users consistently rate greater availability of services or facilities as important, and they rate closer and nicer facilities as less important than non-users. While the importance ratings of non-VA users show the same general trends, the sample size for this group is too small to draw reliable conclusions. The survey also explored how various modes of delivery affected veterans' likelihood of using VA mental health services. As shown in Table 6-35, 60 percent of all veterans would like to receive the services in

TABLE 6-31 Among OEF/OIF/OND Veterans Who Are Not at All Likely to Use VA Mental Health Services in the Future Even If in Need, the Percentage Who Agree with Select Reasons by Use Groups

Reasons Not to Use VA Mental Health Services	Need, VA Users				Need, Non-VA Users				No Need, Non-Users							
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %				
Total	98	51,935	-	-	127	134,387	-	-	287	350,723	-	-	683	904,519	-	-
Used VA before and had a bad experience	52	28,028	54.0%	6.6%	47	39,829	29.6%	4.2%	81	79,274	22.6%	2.8%	61	60,938	6.7%	1.4%
VA doctors/staff did not provide good quality treatment	45	25,103	48.3%	6.9%	44	32,712	24.3%	4.2%	77	77,344	22.1%	2.7%	117	122,393	13.5%	1.6%
Used VA before and did not improve	42	24,412	47.0%	6.6%	27	17,402	12.9%	3.0%	54	42,764	12.2%	1.9%	31	23,315	2.6%	0.5%
You would wait too long for an appointment	47	24,056	46.3%	6.9%	61	55,106	41.0%	5.4%	127	134,586	38.4%	2.7%	260	305,662	33.8%	2.1%
Prefer civilian health care provider	38	19,371	37.3%	5.8%	81	76,450	56.9%	7.0%	142	170,101	48.5%	2.9%	441	575,883	63.7%	2.1%
Facilities are too far away/too hard to get to	22	12,120	23.3%	5.0%	34	30,193	22.5%	4.2%	68	80,897	23.1%	2.2%	186	220,593	24.4%	1.9%
Mental health treatment generally does not work	14	8,855	17.1%	4.4%	11	8,028	6.0%	2.5%	40	43,588	12.4%	1.9%	46	43,561	4.8%	0.7%
Facilities are not clean or attractive	6	2,593	5.0%	2.1%	15	9,449	7.0%	2.4%	31	31,346	8.9%	1.5%	54	62,147	6.9%	1.1%

NOTES: Percentages do not sum to 100% percent because respondents could mark all that apply. "Non-VA user" denotes veterans who receive mental health services but not at a VA facility. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted. SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-32 Among OEF/OIF/OND Veterans Who Have a Mental Health Need and Not at All Likely to Use VA Mental Health Services in the Future Even If in Need, the Percentage Who Agree with Select Reasons

Reasons Not to Use VA Mental Health Services	All OEF/OIF/OND Veterans			
	Unwgt n	Wgt N	Wgt %	SE %
Total	1,140	1,398,993	-	-
Prefer civilian health care provider	722	858,983	61.4%	1.4%
You would wait too long for an appointment	509	528,528	37.8%	1.5%
Facilities are too far away/too hard to get to	317	348,597	24.9%	1.1%
VA doctors/staff did not provide good quality treatment	291	260,941	18.7%	1.3%
Used VA before and had a bad experience	253	213,288	15.2%	1.2%
Used VA before and did not improve	160	109,782	7.8%	0.7%
Facilities are not clean or attractive	110	107,181	7.7%	0.8%
Mental health treatment generally does not work	114	105,132	7.5%	0.6%

NOTE: SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

person, although a significant proportion, 45 percent, indicated they would likely use Internet. Similarly, 44 percent indicate they would likely use phone as a means to receive care in the future.

Among all veterans with a mental health need (not shown in the table), 70 percent indicated that they prefer to receive mental health services in person, and 91 percent of VA users with a mental health need prefer services in person, although in both these groups over half said they would definitely or probably use the Internet or phone.

While more veterans indicated they were willing to use in-person services than other modalities, Internet and phone service offerings were endorsed by large groups and will likely become more popular in future especially with younger veterans from the OEF/OIF/OND cohort. In Table 6-36 the survey results confirm this assertion—50 percent of younger veterans (ages 17–29), 46 percent of 30- to 39-year-old veterans, and 50 percent of 40- to 49-year-old veterans reported they were willing to use the Internet

TABLE 6-33 The Percentage of OEF/OIF/OND Veterans by the Importance of Select Changes the VA Could Make

Changes the VA Could Make	Important				Not Important			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Total	4,180	4,179,998	100%	-	4,180	4,179,998	100%	-
Easier appointment process	3,395	3,331,735	79.7%	0.9%	622	689,116	16.5%	0.9%
Better quality services	3,273	3,252,381	77.8%	1.0%	730	755,576	18.1%	0.9%
Better quality customer service	3,222	3,200,648	76.6%	0.9%	787	805,185	19.3%	0.8%
More available services or facilities	3,177	3,139,848	75.1%	0.9%	835	869,074	20.8%	0.9%
Closer facilities	2,663	2,656,245	63.5%	0.6%	1,352	1,353,561	32.4%	0.6%
Nicer facilities	2,294	2,331,728	55.8%	1.0%	1,698	1,661,128	39.7%	0.9%

NOTES: Weighted % important includes responses of very and moderately important. Weighted % not important includes responses of slightly and not at all important. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

Rows may not sum to 100% due to the omission of the percentages of missing or refused in the table.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-34 The Percentage of OEF/OIF/OND Veterans by the Importance of Select Changes the VA Could Make, by User Group

Changes VA Could Make	Important			Not Important				
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
All OEF/OIF/OND Veterans (N=4,179,998)								
Easier appointment process	3,395	3,331,735	79.7%	0.9%	622	689,116	16.5%	0.9%
Better quality services	3,273	3,252,381	77.8%	1.0%	730	755,576	18.1%	0.9%
Better quality customer service	3,222	3,200,648	76.6%	0.9%	787	805,185	19.3%	0.8%
More available services or facilities	3,177	3,139,848	75.1%	0.9%	835	869,074	20.8%	0.9%
Closer facilities	2,663	2,656,245	63.5%	0.6%	1,352	1,353,561	32.4%	0.6%
Nicer facilities	2,294	2,331,728	55.8%	1.0%	1,698	1,661,128	39.7%	0.9%
All Veterans with Mental Health Need VA Users (N=476,654)								
Easier appointment process	701	387,386	81.3%	1.5%	105	65,209	13.7%	1.3%
More available services or facilities	681	376,505	79.0%	1.6%	130	79,802	16.7%	1.5%
Better quality services	681	373,441	78.3%	1.6%	131	82,450	17.3%	1.5%
Better quality customer service	648	355,353	74.6%	1.4%	164	101,095	21.2%	1.5%
Closer facilities	527	279,738	58.7%	1.9%	285	176,153	37.0%	1.8%
Nicer facilities	432	229,542	48.2%	1.9%	375	223,383	46.9%	1.9%
Non-VA Users (N=272,799)								
Easier appointment process	208	218,407	80.1%	4.4%	32	38,754	14.2%	3.9%
Better quality services	195	209,735	76.9%	5.2%	43	45,710	16.8%	3.9%
More available services or facilities	192	206,249	75.6%	4.3%	47	50,249	18.4%	3.2%
Better quality customer service	191	200,735	73.6%	4.2%	47	52,356	19.2%	3.2%
Closer facilities	155	163,801	60.0%	3.9%	86	95,396	35.0%	3.6%
Nicer facilities	127	128,624	47.1%	4.8%	113	128,538	47.1%	4.4%
Non-Users (N=941,504)								
Easier appointment process	726	746,952	79.3%	1.6%	118	143,630	15.3%	1.7%
Better quality services	687	723,961	76.9%	1.8%	147	160,366	17.0%	1.8%
Better quality customer service	672	706,063	75.0%	1.8%	165	179,504	19.1%	1.7%
More available services or facilities	658	694,299	73.7%	1.7%	181	190,960	20.3%	1.7%
Closer facilities	567	606,545	64.4%	1.9%	271	280,893	29.8%	1.7%
Nicer facilities	464	509,800	54.1%	2.2%	370	375,180	39.8%	2.1%

NOTES: Weighted % important includes responses of very and moderately important. Weighted % not important includes responses of slightly and not at all important. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-35 The Percentage of OEF/OIF/OND Veterans by Their Likelihood of Mode of Future VA Mental Health Service Use

Mode	Yes				No			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
All OEF/OIF/OND Veterans (N=4,179,998)								
In person	2,739	2,515,812	60.2%	0.9%	1,297	1,527,735	36.5%	0.9%
Internet	1,944	1,875,473	44.9%	0.8%	2,080	2,159,905	51.7%	0.8%
Phone	1,980	1,845,485	44.2%	1.1%	2,045	2,188,405	52.4%	1.1%
VA Users (N=476,654)								
In person	744	414,556	87.0%	1.3%	67	41,189	8.6%	1.2%
Internet	424	238,026	49.9%	2.0%	380	212,738	44.6%	1.9%
Phone	499	276,470	58.0%	2.3%	307	175,787	36.9%	2.2%
Non-VA Users (N=272,799)								
In person	143	155,772	57.1%	3.4%	96	99,354	36.4%	3.3%
Internet	132	143,935	52.8%	3.7%	107	111,191	40.8%	3.4%
Phone	108	114,465	42.0%	3.8%	129	138,246	50.7%	4.3%
Non-Users (N=941,504)								
In person	548	554,019	58.8%	1.8%	297	339,709	36.1%	1.7%
Internet	404	419,563	44.6%	1.5%	438	473,337	50.3%	1.6%
Phone	405	423,669	45.0%	2.1%	439	469,498	49.9%	2.2%

NOTES: Weighted % yes includes responses of probably and definitely yes. Weighted % no includes responses of probably and definitely no. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

for future services, whereas only 37 percent of veterans 50 years and older reported being willing to use Internet-based mental health services in the future.

Comparison of Use of Mental Health Services Among Veterans with Need

Although the responses to hypothetical use questions suggest a large share of veterans would use VA services if they had a mental health need, intentions and actions do not always align. As such, the committee sought to develop and estimate a model of actual mental health use to understand the factors that influence the decision to seek help for mental health problems. Of particular interest were veterans who were assessed as having mental health need but who were not receiving treatment. Why are veterans with need not in treatment that might address those needs? The previous sections of this chapter have explored some of those reasons. This section describes a multivariable model that was used to identify predictors of service use and type of use by comparing three groups of veterans with mental health need: (1) users of the VA, (2) users of mental health services but not the VA, and (3) non-users.

The committee first considered how best to model mental health service use. Mental health service use includes three possible outcomes that can be investigated: no use, VA use, and non-VA use only. A multinomial logit specification views the choice to use a VA provider, a civilian provider, or no care at all as occurring simultaneously. In other words, veterans who have a mental health problem make their

TABLE 6-36 The Percentage of OEF/OIF/OND Veterans Within Each Age Category by Their Likelihood of Mode of Future VA Mental Health Service Use

Mode	Yes				No			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
All OEF/OIF/OND Veterans (N=4,179,998)								
In person	2,739	2,515,812	60.2%	0.9%	1,297	1,527,735	36.5%	0.9%
Internet	1,944	1,875,473	44.9%	0.8%	2,080	2,159,905	51.7%	0.8%
Phone	1,980	1,845,485	44.2%	1.1%	2,045	2,188,405	52.4%	1.1%
17 to 29 years old (N=633,990)								
In person	388	386,589	61.0%	2.2%	207	228,406	36.0%	2.1%
Internet	294	318,469	50.2%	1.8%	300	296,323	46.7%	1.7%
Phone	284	299,700	47.3%	2.3%	311	315,295	49.7%	2.3%
30 to 39 years old (N=1,444,386)								
In person	974	885,253	61.3%	1.9%	464	502,911	34.8%	1.9%
Internet	724	660,966	45.8%	1.8%	715	726,559	50.3%	1.9%
Phone	715	646,521	44.8%	2.0%	723	740,384	51.3%	2.0%
40 to 49 years old (N=923,549)								
In person	642	582,026	63.0%	1.7%	276	318,137	34.4%	1.9%
Internet	471	459,972	49.8%	1.9%	442	436,069	47.2%	1.9%
Phone	469	435,535	47.2%	2.2%	445	461,387	50.0%	2.4%
50 years old and older (N=1,103,789)								
In person	722	635,480	57.5%	1.5%	331	439,603	39.8%	1.5%
Internet	442	409,603	37.1%	2.0%	604	662,277	59.9%	2.1%
Phone	503	445,408	40.3%	1.8%	544	626,554	56.7%	1.8%
Missing (N=73,284)								
In person	13	26,464	36.1%	10.1%	19	38,678	52.8%	10.5%
Internet	13	26,464	36.1%	8.9%	19	38,678	52.8%	8.9%
Phone	9	18,321	25.0%	5.9%	22	44,785	61.1%	5.5%

NOTES: Weighted % yes includes responses of probably and definitely yes. Weighted % no includes responses of probably and definitely no. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

decision about *whether* to get care and *where* to get care together, rather than as separate components. An alternative view is that these decisions are *sequential* rather than simultaneous. In this view, veterans first decide to get care and then choose whether to use a VA or civilian provider. This latter view implies that one should use nested models, with the first model predicting the decision to get *any* care and the second model predicting, among those who get care, the chosen provider (VA or non-VA). There is no a priori reason for selecting one specification over the other, and both types of model specifications obtain similar results.

The committee preferred nested models because the results are easier to interpret and felt these models more accurately reflect the nature of the veteran's choice. The results from the multinomial model are more difficult to interpret because they blend, to some degree, the decision to seek care with the decision on the provider.

In addition to the demographic, socioeconomic, and military experience variables shown in Table 6-10, the models also included several variables assessing potential attitudes and beliefs that could pose barriers to treatment seeking, which are described in Table 6-20 above. The analysis is of particular importance because of the possibility of identifying factors that may distinguish high-need users from high-need non-users, thereby giving clues as to why veterans may not be receiving the treatment they need. As before, the analyses exclude veterans who had missing data on one or more of the variables in the regression from the analysis, and therefore the sample size varies across regression models. Only the independent variables that were statistically significant at the bivariate, or the full-model stage, were included in the final model.

The discussion focuses on the two-stage model with the screener scores included as independent variables. Tables 6-37 and 6-38 show the first and second regressions of the two-stage model. Table 6-37 shows the model for predicting use and then Table 6-38 shows the model predicting VA versus non-VA use among veterans with a need who used mental health services. As Table 6-37 shows, among the sociodemographic predictors, only income and having health insurance are statistically significant in predicting use, given a mental health need: having a higher income and having insurance *lower* the likelihood of using mental health services. However, having a non-zero disability rating is significantly associated with mental health service use, and places veterans in higher priority categories for receiving care from the VA, and thus is regarded as insured in this analysis. Among the military/service-related variables being in the Navy/Coast Guard also *lowered* the likelihood of using mental health services. Interestingly, longer deployments tended to be associated with lower odds of mental health treatment among those who needed mental health services. The odds of service use decline in a monotonic fashion from the reference group of veterans who were never deployed through categories with a deployment

TABLE 6-37 Among OEF/OIF/OND Veterans Who Have a Mental Health Need, Adjusted Odds Ratios of Mental Health Service Use (statistically significant variables only)

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Income	\$75,000 or more	0.514*	0.288	0.917
Insured	Insured	0.660*	0.467	0.932
Branch	Navy/Coast Guard	0.652*	0.451	0.944
Deployment time	13–24 months	0.620*	0.399	0.962
Deployment time	25–36 months	0.530*	0.322	0.873
ATSPPH	Continuous	1.080**	1.050	1.112
Encouraged to get help	Continuous	3.361**	2.298	4.917
Perceived need	Yes	1.991**	1.503	2.638
Disability rating	Disability 50 percent or higher	4.504**	2.853	7.111
Disability rating	Disability less than 50 percent	1.905**	1.231	2.948
Distance from VA	Don't know	0.406**	0.217	0.759

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios. ATSPPH = Attitudes Toward Seeking Professional Psychological Help scale.

2,007 unweighted cases initially available, 520 unweighted cases excluded due to missing responses.

Model includes 1,487 unweighted cases representing weighted N of 1,252,699.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 6-38 Among OEF/OIF/OND Veterans Who Use Mental Health Care, the Adjusted Odds Ratios of Using the VA for Their Mental Health Care

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Female	Female	0.471*	0.239	0.929
Income	\$50,000 to \$74,999	0.310*	0.128	0.754
Income	\$75,000 or more	0.300**	0.136	0.665
Insured	Insured	0.111**	0.035	0.355
Deployment time	More than 48 months	3.430*	1.270	9.260
Perceived need	Yes	0.549*	0.314	0.961
Disability rating	Disability 50 percent or higher	17.761**	8.184	38.542
Disability rating	Disability less than 50 percent	5.984**	2.792	12.823
Distance from VA	21–30 miles	0.434*	0.192	0.978
Distance from VA	31–40 miles	0.357*	0.138	0.928
Distance from VA	More than 50 miles	0.269**	0.102	0.712
Distance from VA	Don't know	0.046**	0.017	0.127

NOTES: * $p < .05$; ** $p < .01$; 95 percent confidence limits (CL) for the odds ratios.

1,105 unweighted cases initially available, 257 unweighted cases excluded due to missing responses.

Model includes 848 unweighted cases representing weighted N of 582,306.

Reference categories for the variables are shown in Tables 6-10 and 6-20.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

of 25 to 36 months. The reasons for this association are not clear, but from a health services perspective it helps identify a group that is currently being underserved.

A particularly strong predictor of using mental health services is having a disability rating of 50 percent or more, as veterans with this disability rating were more likely to use the services as veterans who were not disabled (odds ratio [OR] = 4.504). Disabled veterans with a disability rating less than 50 were also more likely to use mental health services (OR = 1.905). In other words, veterans with a mental health need but without a disability rating were substantially less likely to be receiving mental health services than those who did have a disability rating.

As Table 6-37 shows, the analysis also provided some critical information as to whether service use was predicted by several barriers to mental health help seeking that could be potentially modified. Four variables were of particular interest as they might be useful in shaping policy or designing intervention strategies that might bring more veterans with need to mental health treatment. The first is recognizing a need for mental health treatment. As Table 6-37 shows, veterans who perceive such a need have nearly double the odds (OR = 1.99) of actually seeking treatment, which suggests the possibility that if this perception of need could be altered, more veterans with need would enter treatment. A second variable that the committee tested is stigma, and while stigma is clearly an issue of substantial concern to many veterans, the analysis did not find that it significantly predicted service use. A third variable, the ATSPPH Scale, examined whether veterans who believed treatment to be appropriate and potentially helpful for addressing mental health problems were more likely to be users of services. The highest score achievable on this scale is 30 points higher than the lowest score, and each point on the scale associated with an 8 percent increase (OR 1.08 for a one-unit change in the scale score) in the odds of seeking services. Thus, a veteran scoring 20 points higher would have a 160 percent increase in the odds of treatment seeking compared to the veteran scoring 20 points lower. Because the beliefs measured in this scale are potentially modifiable, this finding could be useful in guiding interventions aimed at bringing more veterans with need into treatment. Finally, a fourth potentially modifiable variable concerns whether or not a veteran reports having a friend or relative who encouraged mental health

help seeking. As Table 6-37 shows, veterans who had such support had more than three times the odds of seeking treatment than those who did not. Again, such a finding could be useful for policy and intervention if only by letting the people close to veterans know how important their support is and how helpful it could be in encouraging veterans to seek services.

Among veterans who have chosen to use mental health services, Table 6-38 shows the odds of choosing to use VA care versus non-VA care only. A factor that greatly increases the odds of using VA care is having a disability rating, whether less than 50 percent (which increased the odds by almost 6 times) or 50 percent or more (nearly 18 times). A second factor that substantially increases likelihood of using of the VA is having a cumulative deployment period of more than 4 years. Several other factors significantly *reduce* the likelihood of using the VA; the strongest such factor is insurance status. Veterans who have insurance are far less likely (about one-tenth as likely) to use VA care than those who do not have insurance. Among veterans who seek care, having higher income is another factor that makes them much less likely to use the VA. These findings suggest that veterans with resources—income or insurance access—use those resources to seek needed care outside of the VA. As might be expected, being at a distance from the nearest VA facility with mental health care services also decreases the odds of using VA services rather than non-VA services. This finding suggests that providing options for telemedicine and other remote access services could increase the number of veterans who choose to use VA for their mental health care. Finally, female veterans who use mental health services have significantly lower odds (about half) of using services compared to male veterans.

Existing Data from the Department of Veterans Affairs and the Broader Literature

As of 2015, VA data collection systems did not assess health care use patterns, which further complicates the already difficult task of predicting factors that may increase or decrease future use of VA health services (RAND Corporation, 2015). The committee notes, however, that delay-onset PTSD is one possible factor to consider when projecting the need of VA mental health services for OEF/OIF veterans in the future. The VA has seen many cases of veterans from previous eras presenting with PTSD and other mental health symptoms later in life (VA, 2015a), and the new cohort of Iraq and Afghanistan veterans may be no different. Maguen and colleagues (2012) found that it often takes more than 2 years from the last deployment to seek mental health care. Furthermore, they found that there was a median lag time of 7.5 years between an initial first visit for mental health care and beginning “minimally adequate” mental health treatment.

The predictors of use that have previously been studied could be informative in identifying factors that may increase the use of VA mental health services by OEF/OIF/OND veterans. Di Leone and colleagues (2013) found that some predictors, such as PTSD symptomatology and positive perceptions of VA care, were similar for both male and female OEF/OIF veterans. For men, however, being a minority was also significantly associated with the use of VA mental health services, whereas low income and having been sexually harassed were additional predictive variables for women. For all VA health services (not just mental health), Lee et al. (2015) found that OEF/OIF/OND veterans who were over age 50 or who had been in the Army or Marine Corps or had a “combat” or “logistics” military occupation had the highest proportion of VA use. Additionally, the study found a positive correlation between increasing cumulative deployment time and VA health services use.

It is well established that young adults, especially males, tend to use health care less in general (Fasoli et al., 2010; Hoge et al., 2004; Mackenzie et al., 2006), and therefore, because many OEF/OIF/OND veterans are males and still quite young, it is conceivable that they may now have a predisposition toward not accessing any health care services at all, including mental health care. A study by Maguen et al. (2012)

similarly found that “men waited nearly 2 years longer than women” to seek mental health care, and also that younger age and racial/ethnic minority status were factors in delaying an initial mental health visit.

Conversely, being a female veteran is a predictor of increased use. A VA study focusing specifically on women veterans found that as a result of more women opting to join the military in recent years, there had been an 80 percent increase from FY 2003 to FY 2012 in the number of women using VA health services, with nearly one in five of all female VA patients having served in OEF/OIF/OND (Frayne et al., 2014). The study also reported that, in general, “women tend to use the full range of outpatient services” at the VA (p. 9) more than men, including mental health and substance use disorder services (37 versus 24 percent for any mental health/SUD service; 14 versus 8 percent for at least six visits) (Frayne et al., 2014).

Elbogen et al. (2013) found that the veterans who needed services the most were the ones who were most likely to actually access services. And, not surprisingly, OEF/OIF veterans who go to the VA for mental health services and also express a greater readiness for change tend to be those who make greater use of the services by attending more appointments (Jakupcak et al., 2013).

Kehle-Forbes and colleagues (2015) studied the two most prominent evidence-based psychotherapies endorsed at the VA, and reported that while 82 percent of the veterans in their study had agreed to start prolonged exposure therapy or cognitive processing therapy, 38.5 percent of those eventually dropped out of treatment. Younger veterans were more likely to drop out than older ones.

One possible reason for OEF and OIF veterans not using VA mental health services is simply that some of these veterans are not currently in need of those services. A study by Vaughan et al. (2014) reported that while veterans who had received VA mental health services did show high proportions of probable PTSD or depression (23 percent for PTSD; 21 percent for depression), those who had not sought such services did not have nearly as high a prevalence of the disorders (6 percent for PTSD; 8 percent for depression).

SUMMARY

This chapter details key characteristics of the OEF/OIF/OND veteran population, its potential need for mental health care services, the reasons why veterans may not be seeking mental health care (that is, what are the barriers to access to care?), and the factors that may influence the future use of VA mental health care services. The information presented in this chapter comes primarily from the committee’s survey of veterans; however, information from the committee’s site visits and from the literature also is included. A summary of the committee’s findings is outlined below.

Key Characteristics of the Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn Cohort Who Use and Do Not Use the Department of Veterans Affairs Services

- Important demographic differences exist between the OEF/OIF/OND veteran population and the overall veteran population (that is, veterans from all eras).
 - The OEF/OIF/OND veteran population is younger than the overall veteran population. Seventy-two percent of OEF/OIF/OND veterans are under age 50 while 79 percent of the overall veteran population is over 55 years of age.
 - More OEF/OIF/OND veterans are women than in previous eras. Twenty-one percent of OEF/OIF/OND veterans are women versus 9 percent of the overall veteran population. From FY 2003 to FY 2012, there was an 80 percent increase in the numbers of women veterans using VA health services.

- The OEF/OIF/OND veteran population is more racially and ethnically diverse than the overall veteran population. Sixty-six percent of OEF/OIF/OND veterans are non-Hispanic white versus 77 percent of the overall veteran population.

Need for and Use of the Department of Veterans Affairs Mental Health Care Services

- Evidence from the committee's survey suggests the OEF/OIF/OND veteran population potentially has a substantial need for mental health care services.
 - Of the estimated 4.2 million OEF/OIF/OND veterans, 41 percent screen positive on at least one of the mental health screening measures used in the survey or reported that they were told by a health professional that they have a mental health condition. (A positive screen does not necessarily mean that a veteran has a mental health condition. The screeners used in the survey cannot be used to make a diagnosis; rather, they indicate a need for further assessment by a mental health professional to determine a diagnosis and whether there is a need for treatment.) These data are consistent with the results from another national survey of OEF/OIF/OND veterans (Elbogen et al., 2013).
 - Over two-thirds (69 percent) of OEF/OIF/OND veterans who had a positive result on one or more mental health screeners reported having been told recently by a health professional that they have a least one mental health disorder.
 - Of the veterans who screened negative on the all of the screening measures in the survey, the overwhelming majority (96 percent) do not use either VA or non-VA mental health services.
 - An estimated 22 percent of OEF/OIF/OND veterans perceive a need for care (as measured by responses to a question about whether the veterans felt a need to see a professional because of mental health problems). Fewer veterans express a perceived need than the estimated number of veterans with an assessed need (positive screens or reported diagnosis), but perceived need also indicates a potential need for follow-up assessment among a substantial number of veterans.
 - Over half of veterans with a positive screen do not perceive a need for mental health services, which suggests that some veterans do not seek care because they do not perceive that they personally have a need.
 - Combat exposure and cumulative deployment time are among the strongest predictors associated with having a mental health need.
 - Higher scores on the screening measures are associated with a higher probability of perceived need for mental health care. The number of positive screens also was a strong predictor of the perception of need.
 - The variables other than the screening measures that have a statistically significant association with perceived need are gender, income, and service in the National Guard/Reserves. Women have more than double the odds of perceiving a mental health need than men, veterans earning \$50,000–\$75,000 per year have nearly double the odds of perceiving a mental health need than veterans in the lowest income bracket, and those in the National Guard/Reserves are less likely to perceive a mental health need than those on active duty.
- Given the estimates of potential need found in the survey, the committee examined the degree to which these needs are addressed or met. The survey data suggest there is potentially substantial unmet need for mental health care services in the OEF/OIF/OND population.
 - Of those who have an assessed mental health need (as determined by positive mental health screens or reported diagnosis), less than half (44 percent) of OEF/OIF/OND veterans have

- sought either VA or non-VA mental health care services. While all of the remaining estimated 940,000 veterans cannot definitively be categorized as having unmet needs, the survey results suggest that a substantial number do have unmet needs.
- Among the 22 percent of veterans reporting a perceived mental health need, 48 percent have sought either VA or non-VA mental health care services. When restricted to those veterans with a perceived need who also had an assessed need, 55 percent sought such care.
 - Therefore, depending on which measure of potential need is used (assessed need or assessed need in combination with perceived need), the proportions using VA or non-VA mental health care services varies from 44 to 55 percent, a range that suggests that a large number of veterans are not getting care and that the potential unmet may be substantial.
 - Veterans who have a mental health need but do not have a disability rating are substantially less likely to be receiving mental health services than those who do have a disability rating.
 - OEF/OIF/OND veterans who have a mental health need are more likely to use VA mental health care services than to use non-VA mental health care services.
 - Among the OIF/OIF/OND veterans with a mental health need who used mental health care services, an estimated two-thirds (64 percent) used VA mental health services, with the remainder using only non-VA providers.
 - Among the OEF/OIF/OND veterans with a perceived need who used mental health care services, the percent using VA services is somewhat lower (59 percent).

Barriers and Facilitators to Service Use

- The most common reasons reported by veterans with a mental health need for using VA mental health care services include
 - Prescription benefits (87 percent).
 - Entitlement to services (85 percent).
 - Lower cost of care (83 percent).
 - Convenience of the VA location (68 percent).
 - Liking the VA doctors or already using the VA for years (64 percent).
 - The VA is the only available source of mental health care (64 percent).
- The most common reasons reported by veterans with a mental health need for not using VA mental health care services include
 - Lack knowledge about how to apply for benefits (42 percent).
 - Believe that they are not eligible or entitled to services (40 percent).
 - Not aware that the VA offers mental health services (33 percent).
 - Use other sources of mental health care (33 percent).
 - Do not need care (32 percent).
 - Feel that they do not deserve to receive mental health care benefits from the VA (30 percent).
 - Do not trust the VA (30 percent).
 - Had a prior bad experience at the VA (23 percent).
 - Do not feel welcome at the VA (19 percent).
- Several possible barriers to accessing VA mental health care were identified in the committee's research, particularly for OEF/OIF/OND veterans with mental health need who do not use the VA for mental health services.
 - Transportation challenges.

- Physical distance to a VA facility. A lower percentage of non-VA users with a mental health need live within 30 miles of a VA facility than VA users with a mental health need (45 versus 73 percent). Eleven percent of non-VA users with a mental health need report living more than 50 miles compared with 9 percent of VA users with a mental health need.
 - Travel time to a VA facility. A lower percentage of non-VA users with a mental health need live within a 45-minute drive from a VA facility, compared with VA users with a mental health need (44 versus 76 percent). Fourteen percent of non-VA users with a mental health need live more than 1 hour from a VA facility, compared with 10 percent of VA users with a mental health need.
 - Overall ease of access to a facility. A lower percentage of non-VA users with a mental health need reported that it is very easy, somewhat easy, or neither easy or hard to get to the nearest VA facility that offers mental health services than VA users with a mental health need (49 versus 75 percent).
 - Additional transportation challenges include the facts that some veterans have to rely on public transportation or rides from organizations such as the Disabled American Veterans and that some veterans who have PTSD and/or chronic pain may not be comfortable using public transit or driving long distances.
 - Challenges associated with accessing care (for example, making appointments).
 - More than half (54 percent) of VA users with a mental health care need find the process of getting mental health care to be very or somewhat burdensome. Regression analysis shows that predictors for finding the process of getting mental health care to be very or somewhat burdensome are having insurance, having PTSD, and having a higher barriers score.
 - Only about half (49 percent) of VA users with a mental health care need reported that it was always or usually easy to get an appointment, and only 17 percent reported that evening, weekend, and holiday appointments were always or usually available. Regression analysis shows that predictors for finding the process of getting an appointment with a mental health provider never easy are a high score on the DRRI combat scale and having depression. Having depression is also a predictor for never being able to get VA mental health care on evenings, weekend, and holidays.
 - About a third (34 percent) of VA users with a mental health care need reported that they were very or somewhat dissatisfied with the time between their requests and the appointments. Regression analysis shows several statistically significant predictors for being dissatisfied with time to appointment (never having been married or being divorced, having an associate's or bachelor's degree, being an officer, having to travel more than an hour to a VA facility, and perceived need).
 - Other obstacles that present challenges to obtaining mental health care.
 - Employment concerns such as time off from work (37 percent of veterans who have a mental health need; this number also includes concerns about getting child care), harm to career (37 percent), denial of security clearance (33 percent), and less confidence and respect from co-workers (36 percent) and supervisors (35 percent).
 - Fear of discrimination in domains such as gun ownership (35 percent), loss of contact with or custody of children (15 percent), and loss of medical or disability benefits (12 percent).
- In general, VA users with a mental health need are satisfied with their mental health providers and with the services they receive from the VA.

- The overwhelming majority of VA users with a mental health need are somewhat or very positive about VA's delivery of services (availability of needed services, privacy and confidentiality of medical records, ease of using VA mental health care, mental health care staff's skill and expertise, and staff's courtesy and respect toward patients).
- Among OEF/OIF/OND veterans with a mental health need, veterans were more likely to use VA mental health services if they had a disability rating of 50 percent or higher, perceived a need for mental health treatment, believed mental health treatment is appropriate and potentially helpful, and were encouraged to seek help by a relative or friend.

Future Use of the Department of Veterans Affairs Mental Health Services

- It is estimated that nearly two-thirds of OEF/OIF/OND veterans indicated that they might use VA mental health care services in the future, although the committee believes that this finding may be overstating future use because only about a third of veterans who have mental health care need and perceive that they need care use the VA for mental health care services.
- Among OEF/OIF/OND veterans who do not plan to use VA mental health care services, the reasons for not doing so include that they prefer to see a non-VA mental health provider (61 percent), the wait times for appointments at the VA are too long (38 percent), the physical distance to a VA medical facility is too great (25 percent), and the VA does not provide good quality treatment (19 percent).
- Changes that OEF/OIF/OND veterans would like to see at the VA include making the process for scheduling appointments easier, better quality services and customer service, and more available services or facilities.
- Regarding the mode of delivery, 45 percent of OEF/OIF/OND veterans would likely use the Internet and 44 percent would likely use the phone to receive mental health care. Younger veterans tended to be more open to obtaining mental health care using the Internet.

REFERENCES

- Commission on Care. 2016. *Final report of the commission on care*. Washington, DC: Commission on Care.
- Di Leone, B. A., D. Vogt, J. L. Gradus, A. E. Street, H. L. Giasson, and P. A. Resick. 2013. Predictors of mental health care use among male and female veterans deployed in support of the wars in Afghanistan and Iraq. *Psychological Services* 10(2):145–151.
- Elbogen, E. B., H. R. Wagner, S. C. Johnson, P. Kinneer, H. Kang, J. J. Vasterling, C. Timko, and J. C. Beckham. 2013. Are Iraq and Afghanistan veterans using mental health services? New data from a national random-sample survey. *Psychiatric Services* 64(2):134–141.
- Fasoli, D. R., M. E. Glickman, and S. V. Eisen. 2010. Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services. *Medical Care* 48(4):288–295.
- Frayne, S. M., C. S. Phibbs, F. Saechao, N. C. Maisel, S. A. Friedman, A. Finlay, E. Berg, V. Balasubramanian, S. K. Dally, L. Ananth, Y. Romodan, J. Lee, S. Iqbal, P. M. Hayes, L. Zephyrin, A. Whitehead, A. Torgal, J. G. Katon, and S. Haskell. 2014. *Sourcebook: Women veterans in the Veterans Health Administration. Volume 3. Sociodemographics, utilization, costs of care, and health profile*. Washington, DC: Women's Health Evaluation Initiative, Women's Health Services, Veterans Health Administration, Department of Veterans Affairs.
- GAO (Government Accountability Office). 2017. *DcD health: Actions needed to ensure post-traumatic stress disorder and traumatic brain injury are considered in misconduct separations*. Washington, DC: Government Accountability Office.
- Hoge, C. W., C. A. Castro, S. C. Messer, D. McGurk, D. I. Cotting, and R. L. Koffman. 2004. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine* 351(1):13–22.
- Hosmer, D. W., and S. Lemeshow. 1980. A goodness-of-fit test for the multiple logistic regression model. *Communications in Statistics* A10:1043–1069.

- IOM (Institute of Medicine). 2013. *Returning home from Iraq and Afghanistan: Assessment of readjustment needs of veterans, service members, and their families*. Washington, DC: The National Academies Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: The National Academies Press.
- Jakupcak, M., K. D. Hoerster, R. K. Blais, C. A. Malte, S. Hunt, and K. Seal. 2013. Readiness for change predicts VA mental healthcare utilization among Iraq and Afghanistan war veterans. *Journal of Traumatic Stress* 26(1):165–168.
- Kehle-Forbes, S. M., L. A. Meis, M. R. Spont, and M. A. Polusny. 2015. Treatment initiation and dropout from prolonged exposure and cognitive processing therapy in a VA outpatient clinic. *Psychological Trauma* 8(1):107–114.
- Krouse, W. J. 2015. *Gun control legislation in the 113th Congress*. Washington, DC: Congressional Research Service.
- Krouse, W. J. 2017. *Gun control: Federal law and legislative action in the 114th Congress*. Washington, DC: Congressional Research Service.
- Lee, S. E., V. P. Fonseca, C. L. Wolters, D. D. Dougherty, M. R. Peterson, A. I. Schneiderman, and E. K. Ishii. 2015. Health care utilization behavior of veterans who deployed to Afghanistan and Iraq. *Military Medicine* 180(4):374–379.
- Liu, E. C., E. Bagalman, V. S. Chu, and C. S. Redhead. 2013. *Submission of mental health records to NCIS and the HIPAA privacy rule*. Washington, DC: Congressional Research Service.
- Mackenzie, C., W. Gekoski, and V. Knox. 2006. Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging and Mental Health* 10(6):574–582.
- Maguen, S., E. Madden, B. E. Cohen, D. Bertenthal, and K. H. Seal. 2012. Time to treatment among veterans of conflicts in Iraq and Afghanistan with psychiatric diagnoses. *Psychiatric Services* 63(12):1206–1212.
- McNiel, D. E., C. M. Weaver, and S. E. Hall. 2007. Base rates of firearm possession by hospitalized psychiatric patients. *Psychiatric Services* 58(4):551–553.
- Mott, J. M., K. M. Grubbs, S. Sansgiry, J. C. Fortney, and J. A. Cully. 2014. Psychotherapy utilization among rural and urban veterans from 2007 to 2010. *Journal of Rural Health* 31(3):235–243.
- RAND Corporation. 2015. *Assessment A (Demographics)*. Santa Monica, CA: RAND Corporation.
- Simpson, J. R. 2007. Bad risk? An overview of laws prohibiting possession of firearms by individuals with a history of treatment for mental illness. *Journal of the American Academy of Psychiatry and Law* 35(3):330–338.
- Swords to Plowshares. 2016. *Presentation to the Commission on Care*. <https://commissiononcare.sites.usa.gov/files/2016/03/Presentation-on-OTH-Discharges.pdf> (accessed July 20, 2016).
- U.S. Census Bureau. 2015. *American Community Survey: Veterans statistics*. <https://www.census.gov/library/visualizations/2015/comm/veterans-statistics.html> (accessed June 9, 2017).
- VA (Department of Veterans Affairs). 2014. *Selected Veterans Health Administration characteristics: FY 2002 to FY 2014*. <http://www.va.gov/vetdata/Utilization.asp> (accessed November 12, 2015).
- VA. 2015a. *Aging veterans and posttraumatic stress symptoms*. <http://www.ptsd.va.gov/public/types/war/ptsd-older-vets.asp> (accessed November 12, 2015).
- VA. 2015b. *Analysis of VA health care utilization among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans: Cumulative from 1st qtr FY 2002 through 2nd qtr FY 2015 (October 1, 2001–March 31, 2015)*. Washington, DC: Department of Veterans Affairs.
- VA. 2015c. *Health benefits*. <http://www.va.gov/HEALTHBENEFITS/apply/veterans.asp> (accessed October 23, 2015).
- VA. 2015d. *Health benefits—Priority groups*. http://www.va.gov/HEALTHBENEFITS/resources/priority_groups.asp (accessed October 23, 2015).
- VA. 2015e. *Veterans Health Administration*. <http://www.va.gov/health/> (accessed October 23, 2015).
- VA. 2015f. *Veterans population by veterans integrated service network (VISN): Fiscal year 2015*. https://www.va.gov/vetdata/docs/Maps/Vetpop14_VISN.pdf (accessed February 2, 2017).
- VA. 2016. *Mental Health Satisfaction Survey: Veteran Satisfaction Survey (VSS) National Results*. Department of Veterans Affairs.
- VA. 2017a. *Follow up: Information request from NASEM Committee to Evaluate VA's Mental Health Services*. Department of Veterans Affairs.
- VA. 2017b. *National Center for Veterans Analysis and Statistics: The veteran population model*. https://www.va.gov/vetdata/veteran_population.asp (accessed July 19, 2017).
- VA. 2017c. *Profile of post-9/11 veterans: 2015*. https://www.va.gov/vetdata/docs/SpecialReports/Post_911_Veterans_Profile_2015.pdf (accessed July 19, 2017).
- VA. 2017d. *Response to committee request for information*. Department of Veterans Affairs.
- VA. 2017e. *VA secretary announces intention to expand mental health care to former service members with other-than-honorable discharges and in crisis*. Washington, DC: Department of Veterans Affairs.

- VA. 2017f. *VA caregiver support*. https://www.caregiver.va.gov/support/support_benefits.asp. (accessed October 6, 2017).
- VA National Center for Veterans Analysis and Statistics. 2016. Table 111: Vetpop2014: Living veterans by Veteran Integrated Service Network, age group, gender, 2013–2043. https://www.va.gov/vetdata/veteran_population.asp (accessed November 6, 2017).
- Vaughan, C. A., T. L. Schell, T. Tanielian, L. H. Jaycox, and G. N. Marshall. 2014. Prevalence of mental health problems among Iraq and Afghanistan veterans who have and have not received VA services. *Psychiatric Services* 65(6):833–835.

7

Dimensions of Quality in Mental Health Care

In general, health care in the United States is fragmented, costly, and with significant variation in quality of care. Systems are structured around the management of acute and urgent health problems with a focus on single episodes of treatment. Mental health care is typically separated both structurally and functionally from other components of the health care system. Coordination around the full range of patient health needs is often lacking, contributing to inefficiencies and higher costs. Such system deficiencies are among the barriers to care preventing Americans, particularly those with ongoing needs for care, from receiving appropriate health services (IOM, 2001). In Chapter 2, information about the non-Department of Veterans Affairs (VA) health care sector and about mental illness in the general population is presented for the purpose of general context. Building on that discussion, this chapter broadly describes health care quality in the United States and provides the conceptual foundation for the committee's assessment of mental health care quality at the VA.

The chapter begins by defining health care quality and the attributes of integrated health care delivery systems, which is followed by a summary of the VA's recent system reform initiative. The remainder of the chapter describes the organizational framework for Chapters 8 through 15 of the report, each corresponding to one of the eight dimensions of health care quality. Chapters 8 through 15 each address these quality dimensions by presenting findings from the research literature as well as details from the VA site visits that the committee conducted as part of this study.

DEFINING HEALTH CARE QUALITY

In its landmark report, *Crossing the Quality Chasm: A New Health System for the 21st Century* (IOM, 2001), the Institute of Medicine (IOM) defines quality of care as “the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (IOM, 1990, p. 21). Another common definition is

“doing the right thing for the right patient, at the right time, in the right way to achieve the best possible results” from the federal Agency for Healthcare Research and Quality (AHRQ, 2016).

Health care quality is a multidimensional concept. Donabedian characterized three components of quality health care: technical quality (the provision of care produces achievable health gain), interpersonal quality (patient needs and preferences are addressed), and amenities (the attributes of the physical setting support care) (Donabedian, 1980). IOM’s *Quality Chasm* framework established six aims for high-quality health care that are relevant to mental health care as well as general medical care (IOM, 2001, 2006). All health care should be

- **Safe:** avoiding injuries to patients from the care that is intended to help them.
- **Effective:** providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit.
- **Patient-centered:** providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.
- **Timely:** reducing waits and sometimes harmful delays for both those who receive and those who give care.
- **Efficient:** avoiding waste, including waste of equipment, supplies, ideas, energy and human resources.
- **Equitable:** providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.” (IOM, 2001, pp. 5–6)

Five years after *Crossing the Quality Chasm* (IOM, 2001), IOM released a subsequent report examining quality in the field of mental health and addictive disorders. *Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series* (IOM, 2006) cited ample evidence of problems in the quality of care for mental and substance use problems and illnesses. In addition to the quality problems shared with health care generally, mental health care is distinctive in significant ways. Those distinctive features include the greater stigma attached to mental health diagnoses; more frequent coercion of patients into treatment, especially for substance use problems and conditions; a less developed infrastructure for measuring and improving the quality of care; the need for a greater number of linkages among the multiple clinicians, organizations, and systems providing care to patients with mental health conditions; less widespread use of information technology; and a more educationally diverse workforce (IOM, 2006).

Health care quality that reflects aspects of the IOM framework relies on monitoring how care is delivered. Chapter 15 provides more in-depth information about quality measurement in general and the VA’s quality measurement and improvement programs. Systematic quality measurement is necessary for quality improvement, accountability and transparency, and informed patient decision making.

INTEGRATED SYSTEMS APPROACH TO QUALITY

IOM’s *Crossing the Quality Chasm* (IOM, 2001) argued that integrated health care systems, such as the Veterans Health Administration (VHA) in the VA, are the best care delivery models for providing patients with access to effective, patient-centered, timely, efficient, equitable, and safe care. Integrated systems can improve care coordination and achieve continuous quality improvement and accountability. Optimal collaboration and coordination of patient care is essential for all patients, particularly when the diagnosis involves physical and mental health problems, a chronic condition, multiple conditions, or other complex health problems. Over half (51.7 percent) of all Americans have at least one chronic

health condition (Gerteis et al., 2014), and veterans are more likely than non-veterans to report having multiple chronic conditions (Kramarow and Pastor, 2012). (Chapter 4 provides more details about the high risk of mental health problems and comorbidities among Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn veterans.)

In a fully integrated delivery system, different levels of care from physicians, clinics, hospitals, academic medical centers, and long-term care facilities are under one management umbrella (Essential Hospitals Institute, 2013). As described in Chapter 2, the VHA is the largest fully integrated health care delivery system in the nation. Kaiser Permanente is the largest fully integrated system in the private sector. Accountable care organizations are rapidly emerging as another approach to integrated care. Common features of integrated systems include (1) communication and information sharing across the care continuum, and (2) the coordination of patient care to improve the patient experience and care quality (Hwang et al., 2013).

A growing body of empirical research shows that integrated delivery systems have a positive effect on the quality of care in such areas as clinical effectiveness, lengths of stay, medication errors, and the number of office visits (Enthoven and Tollen, 2005; Hwang et al., 2013). Favorable patient outcomes have been found in integrated systems using care planning, multidisciplinary teams, self-management, and ongoing assessment and follow-up (Collins et al., 2010; Wagner et al., 1996). Several studies have found better outcomes for patients treated in integrated delivery systems than in non-integrated delivery systems (Hwang et al., 2013).

Effective system synergies across the continuum of care are the cornerstone of integrated care and quality. Effective synergistic care delivery, or *systemness*, can be described as delivering patient-focused, seamless care across the many parts of the system in order to maximize value for customers and proactively address the health of populations (Zuckerman, 2014). With *systemness*, synergies are obtained when all the component parts come together as a system, and thus lead to predictably and consistently good outcomes (ECRI Institute, 2013).

The attributes of a “world-class medical facility” have implications for what a highly functioning integrated health system should like. As described by the Defense Health Board, an advisory body for the Department of Defense, the attributes of a world-class medical facility include “applying evidence-based healthcare principles and practices, along with the latest advances in the biomedical, informatics and engineering sciences; using the most appropriate state-of-the-art technologies in an easily accessible and safe healing environment; providing services with adequate numbers of well trained, competent and compassionate caregivers who are attuned to the patient’s, and his or her family’s culture, life experience and needs; providing care in the most condition appropriate setting with the aim of restoring patients to optimal health and functionality; and being led by skilled and pragmatic visionaries” (Kizer, 2010).

Also a concept that is germane to highly functioning integrated health systems is a “culture of high reliability.” The attributes of high-reliability organizations include reciprocal accountability between management and clinical teams, strong and open communication among team members, leadership responsibility and dedication to safety and highly reliable organization performance, mutual respect among team members, and fair and just treatment for all team members (Wu and Kizer, 2016).

A recent independent assessment of VA’s health care delivery system and management processes concluded that VA should focus on interdependent systems components—governance, operations, data and tools, and leadership—if it is to successfully improve its complex health care system and achieve higher levels of “systemness” (MITRE Corporation, 2015). The assessment was authorized under Sec-

TABLE 7-1 MyVA 2016 Priorities

Veteran Experience	Employee Experience
<ul style="list-style-type: none"> • Improve the veteran experience • Increase access to health care • Improve community care • Deliver a unified veteran experience • Modernize contact centers • Improve the compensation and pension examination • Develop a simplified appeals process • Continue to reduce veteran homelessness 	<ul style="list-style-type: none"> • Staff critical positions that are vacant • Transform VA Office of Information and Technology • Transform VA supply chain to increase responsiveness • Reduce operating costs

SOURCE: VA, 2016.

tion 201 of the Veterans Access, Choice, and Accountability Act of 2014.¹ In the report, the mechanisms for purchasing care, such as the Veterans Choice Program that allows eligible veterans to receive health care in their communities rather than waiting for a VA appointment or traveling to a VA facility, are offered as an example of an area that would benefit from a systems approach to overcome piecemeal tactics to reforming access problems as well as the lack of guiding strategy for VA's purchased care enterprise as a whole (MITRE Corporation, 2015). More information about the Veterans Choice Program can be found in Chapter 9.

SYSTEM TRANSFORMATION IN THE DEPARTMENT OF VETERANS AFFAIRS

In 2014, following reports of persistent problems in access, quality, leadership accountability, and the associated downturn in public opinion, the VA launched a new system transformation, called MyVA, which is aimed at achieving customer service excellence and building a high-performing organization to serve the nation's veterans (VA, 2015). Table 7-1 shows the 2016 priorities for MyVA, which include efforts to improve both the veteran experience and employee experience (VA, 2016).

MyVA's goals include offering same-day access to mental health and primary care services when medically necessary (VA, 2016) and expanding mental health offerings, mainly through the Veterans Choice Program, which gives eligible veterans options for obtaining care from private-sector providers. MyVA's other goals include creating mobile apps for mental health and improving the Veterans Crisis Line. The VA is tracking progress toward these goals (VA, 2013). For example, in 2017 the VA announced a policy to offer emergency mental health care to veterans with an other-than-honorable discharge status (VA, 2017) (see Chapter 6 for more details). The chapters that follow identify various other VA policies, initiatives, and programs for mental health service delivery and present the committee's findings about VA mental health service delivery along the dimensions of quality discussed in this report.

REPORT FRAMEWORK

The national health care context, quality frameworks, and the attributes of high-functioning health systems discussed above have informed the focus of the committee's assessment of the VA's mental health care services. Chapters 8 to 15 address five of the six IOM quality aims—effective, patient-centered, timely, efficient, and equitable care (patient safety issues are beyond the purview of this

¹Public Law 113-146.

study)—as well as the three structural areas of workforce and facilities, health technology, and quality improvement, which relate to the entire VA health care system and bear on all of the IOM quality aims.

With these eight aspects of quality in mind, the committee drafted examples of the types of questions that define each area operationally and that can help inform the public, health care administrators, policy makers, regulators, and others about the level of quality that a health system provides. Refer to Table 7-2.

Given the complex nature of health care systems and practice, assigning assessment questions to a particular quality aspect as shown in Table 7-2 is somewhat subjective and does not capture the overlap that exists across various aspects of quality. For instance, having processes in place to integrate and coordinate care makes care delivery more efficient, but it can also result in effective care. Access to care, which is central to the quality of a health care system, is an issue that must be addressed in a number of ways, in addition to the timeliness of service delivery as expressed in the IOM quality framework. For

TABLE 7-2 Types of Quality Assessment Questions

Quality Aspect	Assessment Question
Workforce and facilities	<ul style="list-style-type: none"> • Is there sufficient capacity (staff, space, systems) to meet changes in service demand (e.g., surge situations)? • Do the physical facilities support delivery of quality health care? • Are the type, number, placement, and training of providers and support staff appropriate?
Timely access	<ul style="list-style-type: none"> • Are patients connected to the appropriate caregiver when they need to be? • Is the length of time to receive needed services acceptable clinically and to the patient?
Patient centered	<ul style="list-style-type: none"> • Can patients physically access services and readily navigate the health system? • Are travel distance and travel time to needed services (including to a facility with telemedicine equipment) acceptable to the patients? • Can patients use services without penalty or negative impact to employment or livelihood?
Effective	<ul style="list-style-type: none"> • Do programs, processes, and decision making include patient input? • Are appropriate evidence-based treatments available and provided to those needing care?
Efficient	<ul style="list-style-type: none"> • Are treatment outcomes consistent with expected outcomes? • Are systematic processes and structures in place to integrate and coordinate mental and nonmental health? Within mental health services, are transitions between levels of care appropriate and coordinated?
Equitable	<ul style="list-style-type: none"> • Are the needs of select populations addressed adequately? • Are different populations and subgroups afforded equal access to services and are they using services equally?
Health technology	<ul style="list-style-type: none"> • Does the information management infrastructure adequately support clinical decision making? • Is there connectivity and adequate tools to engage in digital communication with providers, caregivers, peers, and computerized health applications?
Quality improvement	<ul style="list-style-type: none"> • Overall, is access to and the provision of care predictable and consistent across the delivery system? • Are clinical performance and outcome data captured, analyzed, and acted upon via quality improvement processes? • Are quality-assessment and quality improvement methods built into care processes, and are they being used? • Are data on patient-reported assessments of care, access to services, staff, and outcomes captured, analyzed, and acted upon?

SOURCES: IOM, 2001; Ken Kizer for the Committee to Evaluate the Department of Veterans Affairs Mental Health Services.

example, to ensure that veterans can obtain needed care there must be sufficient staffing, facilities, and infrastructure in place to meet the demand for services. Services must be within reach for veterans who wish to obtain access to them, including by having the latest technology available to patients and providers—which is digitally accessible when appropriate—to maximize the reach and efficiency of services.

Taken together, the eight chapters that follow illustrate the complexity of assessing and improving health care quality, particularly in a large, multifaceted, and dynamic health system like the VHA. In the 1990s, VHA's reform efforts were focused on systematizing quality assessment and improvement in order to ensure that veterans received the highest-quality health care possible everywhere in the VA health care system. Those efforts were successful in many ways and had positioned the VA as a model for how to improve patient outcomes and achieve system-wide efficiencies (Kizer et al., 2000). Since then, the significant consequences of the long-standing military conflicts in Iraq and Afghanistan have challenged the VA to deliver consistently excellent quality of care and service to veterans. The information gathered and reviewed for this report demonstrates the VA's attention on and progress toward quality care and service, but as summarized in Chapter 16, additional efforts are necessary for the VHA to become a high-reliability organization and reduce variation in care, address the unmet needs of individual patients, and improve the health of the veteran population.

REFERENCES

- AHRQ (Agency for Healthcare Research and Quality). 2016. *Understanding health care quality*. <https://archive.ahrq.gov/consumer/guidetoq/guidetoq4.htm> (accessed December 15, 2016).
- Collins, C., D. L. Hewson, R. Munger, and T. Wade. 2010. *Evolving models of behavioral health integration in primary care*. New York: Milbank Memorial Fund.
- Donabedian, A. 1980. *The definition of quality and approaches to its assessment. Vol 1. Explorations in quality assessment and monitoring*. Ann Arbor: Michigan Health Administration Press.
- ECRI Institute. 2013. Systemness in healthcare: More than the sum of its parts. In *Health Technology Trends*. Plymouth Meeting, PA: ECRI Institute.
- Enthoven, A. C., and L. A. Tollen. 2005. Competition in health care: It takes systems to pursue quality and efficiency. *Health Affairs (Millwood)* Suppl Web Exclusives:W5-420–433.
- Essential Hospitals Institute. 2013. *Integrated health care—literature review*. Washington, DC: Essential Hospitals Institute.
- Gerteis, J., D. Izrael, D. Deitz, L. LeRoy, R. Ricciardi, T. Miller, and J. Basu. 2014. *Multiple chronic conditions chartbook: 2010 medical expenditure panel survey data*. Rockville, MD: Agency for Healthcare Research and Quality.
- Hwang, W., J. Chang, M. Laclair, and H. Paz. 2013. Effects of integrated delivery system on cost and quality. *American Journal of Managed Care* 19(5):e175–e184.
- IOM (Institute of Medicine). 1990. *Medicare: A strategy for quality assurance, volume i*. Edited by K. N. Lohr. Washington, DC: National Academy Press.
- IOM. 2001. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.
- IOM. 2006. *Improving the quality of health care for mental and substance-use conditions: Quality chasm series*. Washington, DC: The National Academies Press.
- Kizer, K. W. 2010. What is a world-class medical facility? *American Journal of Medical Quality* 25(2):154–156.
- Kizer, K. W., J. G. Demakis, and J. R. Feussner. 2000. Reinventing VA health care: Systematizing quality improvement and quality innovation. *Medical Care* 38(6 Suppl 1):I7–I16.
- Kramarow, E. A., and P. N. Pastor. 2012. *The health of male veterans and nonveterans aged 25–64: United States, 2007–2010*. Hyattsville, MD: U.S. Department of Health and Human Services.
- MITRE Corporation. 2015. *Independent assessment of the health care delivery systems and management processes of the Department of Veterans Affairs volume i: Integrated report*.
- VA (Department of Veterans Affairs). 2013. *VHA Strategic Plan: FY 2013–2018*. Washington, DC: Department of Veterans Affairs.
- VA. 2015. *MyVA integrated plan overview*. Washington, DC: Department of Veterans Affairs.
- VA. 2016. *MyVA transformation update*. Washington, DC: Department of Veterans Affairs.

- VA. 2017. *VA secretary announces intention to expand mental health care to former service members with other-than-honorable discharges and in crisis*. Washington, DC: Department of Veterans Affairs.
- Wagner, E. H., B. T. Austin, and M. Von Korff. 1996. Organizing care for patients with chronic illness. *Milbank Quarterly* 74(4):511–544.
- Wu, H. W., and K. W. Kizer. 2016. *Surgical adverse events in California: Trends in reporting and recommendations for prevention and management of reported events*. Sacramento, CA: Institute for Population Health Improvement, University of California, Davis.
- Zuckerman, A. M. 2014. *Systemness: The next frontier for integrated health delivery*. Chicago, IL: Becker's Hospital Review.

8

Mental Health Workforce and Facilities Infrastructure

The Department of Veterans Affairs (VA) employs mental health providers of many different disciplines including psychiatrists, psychologists, licensed clinical social workers, marriage and family therapists, peer specialists, substance use counselors, care navigators, and advanced practice psychiatric nurses (including psychiatric clinical nurse specialists and psychiatric nurse practitioners). However, difficulty recruiting, problems with retention, and lengthy hiring procedures contribute to high vacancy rates throughout the system, and these vacancy rates can be a barrier to service. Furthermore, some locations lack the physical space needed to fill some vacancies or adequately accommodate the size of their clientele.

A fully staffed facility will be able to schedule more appointments, operate more efficiently, and, ultimately, serve more veterans than an otherwise identical understaffed facility. The Government Accountability Office (GAO) reported that while the VA has met recent hiring initiatives designed to increase the number of inpatient and outpatient mental health providers, the VA continues to face challenges in hiring mental health staff to meet the demand for services (GAO, 2015). The GAO cites pay disparities with the private sector, competition between VA medical centers (VAMCs) to fill positions, lengthy hiring processes, a lack of space for new hires, a lack of sufficient support staff, and a nationwide shortage of mental health professionals as reasons why the vacancies are going unfilled. This chapter will describe the current state of the VA mental health workforce as well as promising practices, initiatives, and activities the VA and mental health community at large are undertaking to address mental health workforce issues. The discussion includes details about the VA's program to train VA providers and enhance the VA's capacity to provide evidence-based care and also highlights findings from the committee's site visit and survey research about providers' and patients' perspectives on the experience of care at the Veterans Health Administration (VHA). The chapter also will discuss the physical infrastructure of VA facilities and their proximity to where veterans live and how those factors affect patient access.

MENTAL HEALTH WORKFORCE

VA-provided data indicate that in fiscal year (FY) 2017 (as of May 31, 2017) there were 9,986.5 full-time equivalent (FTE) mental health providers working in the system (psychologists, psychiatrists,

licensed professional mental health counselors, marriage and family therapists, and peer support). This count does not include nurses or social workers working in mental health who are undoubtedly mental health providers but are not counted as such in the VA data (see the Workforce Tracking and Efficiency section of Chapter 12 for an expanded discussion on VA-collected workforce data). This is a slight decline from FY 2016 when there were 10,008.2, but an increase from FY 2013 when there were 8,473 (VA, 2017h). More than half of these providers are psychologists. Different data provided by the VA indicate that, as of May 31, 2017, there were 8,577.84 FTE nurses (these data do not including psychiatric mental health nurse practitioners) and 4,695.9 social workers working in mental health (VA, 2017h). The organization and types of mental health providers staffing VA health care facilities can be variable across the VA health care system.

In Assessment G of the 12 independent assessments of the VA, as directed by the Veterans Access, Choice, and Accountability Act of 2014, Grant Thornton LLP examined VA provider staffing and productivity (Grant Thornton LLP, 2015). While the Grant Thornton assessment found the staffing ratios of provider per patient population for most specialties in the VA to be lower than industry standards, for psychiatry VA provider ratios per patient population were actually higher than industry standards (Grant Thornton LLP, 2015). However, a recent GAO report cited incomplete and inaccurate provider staffing level data as a major deficiency in the VA's metrics and models that affects the completeness and accuracy of information on clinical productivity and efficiency at VAMCs (GAO, 2017). Provider staffing and productivity at the VA is discussed further in Chapter 12, which examines efficiency of care delivery.

Hiring and Vacancies

The Grant Thornton assessment found that the VA is struggling to fill provider vacancies. As of January 6, 2015, the VA had 16,995 vacancies for providers and clinical support staff (of all disciplines) that had been open for at least 180 days (Grant Thornton LLP, 2015). The vacancy rates are generally higher in the VA than in the private sector. There is, however, great variability within the VA as some of the Veterans Integrated Service Networks (VISNs) have fewer than 300 vacancies and others have over 1,000 (Grant Thornton LLP, 2015). Table 8-1 below shows data from the VA Office of Mental Health and Suicide Prevention (formerly the VA Office of Mental Health Operations) on vacancy rates by mental health profession from June 1 to June 30, 2016. The gap in mental health staffing has broad effects on the system's ability to deliver patient-centered care (see Chapter 10) and effective care (see Chapter 11).

Provider vacancies in the VA, particularly for mental health providers, are in part a reflection of a mental health provider shortage nationwide (Annapolis Coalition on the Behavioral Health Workforce, 2007). The Health Resources and Services Administration (HRSA) reports that as of January 1, 2016, there were 4,362 designated health professional shortage areas in the country, defined as having a short-

TABLE 8-1 VHA Mental Health Position Vacancy Rates

Profession	National Average (%)	Range Across VISNs (%)
Psychiatrist	18.4	6.3–30.9
Psychologist	14.2	6.3–23.1
Social worker	11.6	4.9–18.3
Nurses	12.3	5.4–19.6
Peer Specialist	13	2.5–24.2
Licensed professional counselor	19.3	0–60
Marriage and family therapist	16.9	0–50

SOURCE: VA Office of Mental Health Operations, 2017.

age of providers in a given geographic area¹ (HRSA Data Warehouse, 2016). Furthermore, the Substance Abuse and Mental Health Services Administration reported to Congress in 2013 that 55 percent of all U.S. counties (all of which were rural) have no practicing psychiatrists, psychologists, or social workers. A study from 2009 revealed that 77 percent of counties had a severe shortage of prescribing and non-prescribing mental health providers, and 96 percent had at least some unmet need for mental health (Thomas et al., 2009).

A combination of factors is behind to the shortage of psychiatrists both in the VA and in the health care industry overall. One factor is that the current psychiatry workforce is aging. The majority of practicing psychiatrists—nearly 60 percent (12,486)—were 55 or older in 2015 (Staff Care, 2015). Many of them may be retiring in the coming years, while projections show that fewer medical students will go into psychiatry as a specialty. Between 2014 and 2017, 6,032 students will complete graduate medical education programs for general psychiatry (Staff Care, 2015). This is expected to set up a greater shortfall as more psychiatrists will retire in the coming years than enter the workforce. VA data reflect this finding—21.7 percent of psychiatrists and 12.0 percent of psychologists in the VHA workforce will be retirement eligible by September 30, 2017 (VA, 2017b).

The Grant Thornton LLP assessment of VA staffing (Grant Thornton LLP, 2015) found that the lengthy hiring process at the VA may also contribute to high vacancy rates and provider shortages. While there are no hiring-time data available (the VA does not track hiring times), the assessment reported consistent complaints from VAMC leaders that it takes too long to hire VA staff (both providers and clerical staff). It can take up to 4–8 months for a candidate to begin working after he or she is selected to be hired. In the private sector, it is typical for employees to begin work within 2 months or less of being hired (Grant Thornton LLP, 2015). The certification of applicants' credentials and the VetPro² background check were cited as major contributors to the lengthy hiring process. The VA has acknowledged that lengthy hiring practices are a barrier to recruitment for mental health professionals (VA, 2016d).

Complaints about the lengthy hiring process were frequently heard on the committee's site visits. One VA staff member stated, "We have such an archaic hiring system. Even if we could get the good employee that applied, by the time we get back to them, they've moved on and been hired someplace else." [El Paso, Texas]

Recent attrition among VA human resources staff has further compounded hiring problems by limiting the office's ability to recruit clinical staff in a timely manner (GAO, 2016). According to a recent GAO report, in FY 2015 attrition among VA human resources staff was 12 percent. The report also states that VA's current internal oversight and control practices limits its ability to monitor and improve human resources (HR) processes, make data-driven decisions, and determine appropriate HR training needs. However, in 2017 VA announced it will establish a "manpower management office" with the ultimate goal of establishing a position management system to help improve the hiring process (VA, 2017g).

A recent VA report citing Bureau of Labor Statistics data concluded that while VA salaries are below the industry standard for most health provider specialties, VA mental health care providers are actually paid higher salaries than their private-sector counterparts (VA, 2016d). The VA report found that psychiatrist salaries are, on average, 7 percent higher than in the private sector; psychologist salaries are 23 percent higher; VA marriage and family therapists salaries are 18 percent higher; mental health counselor salaries are 29 percent higher; and peer support staff salaries are 11 percent higher. Salaries for nurses, social workers, and other mental health professionals were not reported (VA, 2016d). This finding, however, contradicts previous reporting by the GAO (2015).

¹Health professional shortage areas are geographic areas made up of a county, a county subdivision, a census tract, or a combination of any of the above.

²VetPro is the VA's Web-based credentialing system that all VA hires must complete before they begin employment.

On the committee's site visits, VA interviewees described a high rate of staff turnover due in part to a high-stress work environment where the clinical demand exceeds the supply ("We had a psychiatrist here through Primary Care Mental Health Initiative. He was here, I think, six to seven months. Because of the workload over in this area, he decided he didn't want to continue here" [East Orange, New Jersey]). In addition, in some of the locations perceived by staff as "less desirable" places to live (for example, Temple and El Paso, Texas, and outlying community-based outpatient centers in many areas), interviewees said that they believed clinicians were taking jobs at the local VA in order to "get their foot in the door" so they could move to a more desirable location when a position became available ("It's harder to recruit the professionals to go out to these small towns to live out there or to drive out there" [Cleveland, Ohio]).

Because these clinicians reportedly were remaining with the VA, the system as a whole was not losing intellectual capital in these cases. At the local level, however, the turnover was reportedly having an adverse effect on the remaining staff and, more importantly, the veterans regularly had to adjust to a new therapist.

Job Stress, Burnout, and Space Constraints

Burnout and job-related stress at the VA may contribute to the high turnover among health care providers. While research on the topic is scant, one recent study (Garcia et al., 2014) found that, among a sample of 138 (non-prescribing) VHA mental health clinicians who provide evidence-based posttraumatic stress disorder (PTSD) care, 50.0 percent reported feeling exhausted and 47.1 percent reported feeling cynical on the job. Having more clinical work than could be accomplished predicted both exhaustion and cynicism. Organizational bureaucracy politics was a predictor of cynicism. Demographic variables were not predictors of either exhaustion or cynicism. A number of factors were significantly correlated with "mental health days" taken by providers (work absenteeism). Feeling that there is more clinical work than can be done, feeling that the clinic is understaffed, and feeling that organizational bureaucracy is negatively affecting work were associated with increased absenteeism. Feeling that you are part of a coherent team, feeling that co-workers are supportive, and feeling that good work is acknowledged by superiors was associated with decreased absenteeism. The authors also asked participants about their intent to leave the VA within the next 2 years. While the majority of the sample (58 percent) reported it was "not likely" or "not very likely" that they would leave in the next 2 years, 32 percent reported it was somewhat or very likely that they would leave. Not surprisingly, those who reported that they were likely to leave in the next 2 years were more likely to report feeling cynicism and exhaustion (Garcia et al., 2014).

In another study by the same lead author (Garcia et al., 2015), the researchers measured burnout among 125 VA psychiatrists using the Maslach Burnout Inventory-General Survey delivered via the Internet. The survey was sent out to 500 randomly selected VA psychiatrists. The survey measured cynicism, exhaustion, professional efficacy, and intent to leave the VHA. Among the 125 psychiatrists who completed the survey, 90 percent reported high cynicism, 86 percent reported high exhaustion, and 74 percent reported high professional efficacy. Cynicism and exhaustion were far higher in this sample of prescribing psychiatrists than in a similar study, cited above of non-prescribing clinicians (Garcia et al., 2014). High cynicism predicted intent to leave the VA and not feeling like part of a team predicted cynicism. Complaints about workplace conditions, such as unfair treatment by supervisors and insufficient resources, predicted exhaustion (Garcia et al., 2015).

In a recent report, VA concluded that there is a system-wide problem with providing adequate clinical support staff or "medical support assistants" (MSAs) to mental health providers. The report states

that the VA “currently has no way of tracking data on clerks and other program support staff working in mental health clinics, and thus it is difficult to identify and address local gaps in staffing for these positions” (VA, 2016d, p. 35). Since then, the VA has been working to improve the MSA staffing model although final recommendations to improve the consistency of MSA staffing for mental health programs have not been announced (VA, 2017e).

The committee’s site visit interviews revealed how this puts a strain on the workforce. Many VA clinical staff interviewees described having too few clinical staff to accommodate the demand for services. In several locations, supply limitations were described as resulting from clinicians having to perform administrative activities that would normally be performed by support staff:

Twenty-five percent of my time is spent actually doing clinical services as the team lead. The other 75 percent, I’m doing administrative stuff. [Charleston, South Carolina]

Finally, even if vacancies are filled, staff in many locations indicated that there is a lack of sufficient space in which to house staff and provide clinical services.

If we hire all of the individuals that we are being expected to hire . . . we cannot place them. We have many creative options where folks were sharing space, particularly in mental health, working alternate hours, doing clinical visits. [Nashville, Tennessee]

In several of the VISNs, new mental health outpatient clinics are currently under construction. Once these facilities are open, many of the space issues described by staff may be alleviated. However, turnover and hiring are likely to remain issues because of the challenges previously noted.

Through interviews with over 700 VA providers, the Grant Thornton staffing assessment (Grant Thornton LLP, 2015) identified several provider and leadership-reported barriers that providers face when delivering care. Nearly half of the providers interviewed reported insufficient exam rooms. More than 40 percent reported insufficient clinical staff and nearly 30 percent reported insufficient non-clinical staff. Nearly 30 percent reported that the electronic health record was slow to use and nearly 25 percent reported that they were not working to the top of their licensure. The assessment points out that many of the barriers are interconnected. For example, if a physician needs more exam room space and more support staff it will not necessarily increase productivity to hire more support staff but not provide additional rooms for the additional staff to use. While the additional support staff could prepare patients before a physician sees them, without additional exam room space there may be nowhere for that to happen, and productivity would not increase (Grant Thornton LLP, 2015).

Many of these same issues were identified in the VA’s National Mental Health Providers Survey in 2015. (See Chapter 15 for details about VA’s mental health provider survey.) Between December 2015 and January 2016, 8,700 mental health providers completed the survey administered by the VA. Based on the responses, the VA identified space limitations and lack of clerical support as “areas for improvement.” Filling vacancies, the inability to schedule evidence-based treatments due to full provider schedules, lack of discussion about VA mental health service requirements, and tele-mental health equipment shortages and technical performance issues were also identified as areas for improvement, based on how these items were rated by survey respondents. The VA also identified a number of strengths based on survey respondents’ agreement with some survey items. Overall, most of these strengths were related to the respondents’ beliefs that they were providing valuable, effective services to veterans and improving access to care (VA, 2016c).

Strengthening the Mental Health Workforce

The VA has employed a number of strategies to help bolster the recruiting and retention of and compensation for its workforce. It has also expanded its mental health workforce to include professionals with a wider variety of credentials, which has expanded its applicant pool. This section will discuss some of these efforts.

The VA has affiliation agreements with nearly every medical school in the United States. In 2014, the VA trained over 40,000 medical residents, over 20,000 medical students, and several hundred advanced medical fellows (VA, 2017d). In 2016, the VA offered over 1,000 psychiatry residency positions, over 1,000 psychology residency or internship positions, and over 1,000 social work internships (Jones et al., 2015). Title 38 U.S.C. mandates that the VA train health professionals to address its own needs and those of the nation. It is the largest training program of health professionals in the United States (VA, 2017d), and about 70 percent of psychologists employed by the VA received some of their academic or residency training at the VA. Nationally, 50 percent of psychologists received at least some VA training (Jones et al., 2015). In 2017, the VA announced it was “pursuing legislation to expand graduate medical education training opportunities to help with staff shortages” (VA, 2017g, p. 3).

The Veterans Access, Choice and Accountability Act of 2014 authorized an additional 1,500 training positions for primary care and mental health. These were originally required to be created within 5 years of the law passing, but that has since been extended to 10 years (VA, 2017e). Thus far, 136.4 residency training slots have been added under mental health.

Separately, beginning in 2012, the VA began a 5-year mental health education expansion (MHEE) program to strengthen the pipeline of well-trained mental health professionals with the goal of recruiting and hiring an additional 1,600 VA-trained mental health providers (VA, 2015). Through the MHEE program, four new professions were allotted training opportunities at the VA. These include residencies for psychiatric/mental health nurse practitioners and physician assistants and internships for licensed professional mental health counselors and marriage and family therapists (VA, 2017e). Through May 2017, 764.8 new mental health training positions have been added. See Table 8-2 below for a breakdown of training slots by profession. The VA is currently planning to further expand its training portfolio to include neuropsychology fellows, psychology interns, and master’s level counselors. There are also plans to expand the number of physician assistant residency positions to increase the prescribing capacity in the system (VA, 2017e). It is notable, however, that expanding the number of residencies for psychiatric

TABLE 8-2 VA Mental Health Training Slots by Profession, Expansion Since 2013/2014 and Current Total (as of May 31, 2017)

Profession	Expansion Slots Since 2013/14	Current Total Number of Slots
Psychiatry	228.2	1235.38
Psychology	334	1149
Social work	112	1033
LP mental health counselor	21	21
Marriage and family counselor	8	8
Mental health nursing	32	52
Physician assistant	7	7
Pharmacy	74	74
Occupational therapy	1	1
Clinical pastoral education	41	153

SOURCE: VA, 2017h.

mental health nurse practitioners would also expand the prescribing (and diagnosing) capacity of the system.

The VA is permitted to avoid the lengthy hiring process by appointing academic trainees and former trainees to Title 38 and Hybrid Title 38 positions. Under this mechanism, the VA may tentatively offer positions to trainees and former trainees without posting a vacancy announcement and going through the lengthy hiring process. Offers are contingent upon meeting the position's required qualifications at the time of appointment. During FY 2016, physician, nurse, psychologist, and physician assistant trainees were eligible to be appointed to positions under this rule.

The VA is also permitted to offer incentives for recruitment, relocation, and retention. Up to 25 percent of annual salary may be offered to help fill critical vacancies or to encourage employees to move to less desirable locations. The VA may also offer the 25 percent incentive to retain high-quality or critical employees that may otherwise leave (VA, 2013b).

Student loan debt reduction incentives are also available under the Education Debt Reduction Program to VA employees whose positions providing direct patient care are difficult to recruit and retain. Eligible loans must be for the employee's professional training directly related to the position held, but only certain positions designated by the VA are eligible for loan repayment incentives. Eligible student loan payments are reimbursed by the VA to the employee. Under the program, employees may receive up to \$120,000 over 5 years (VA, 2017a).

Similarly, the Clay Hunt Suicide Prevention for American Veterans Act³ contained a provision for the VA to establish a pilot program to repay up to \$30,000 in student loans to psychiatrists practicing in the VA to incentivize recent psychiatrist graduates entering the workplace to consider employment at the VA. A report summarizing the first 2 years of the program is due to Congress in 2017.

In 2012, as a part of a mental health hiring initiative, the VA announced it would begin to include marriage and family therapists (MFTs) and licensed professional counselors (LPCs) in its mental health workforce. According to 2014 data there were over 150,000 MFTs and LPCs in the United States (BLS, 2016), representing a significant share of the overall mental health workforce nation-wide, so the VA's inclusion of these workers in its hiring significantly expanded the pool of potential VA mental health providers. Additionally, the VA also offers a variety of scholarship, nursing education, and residency incentive programs to help attract health care professionals to the VA (VA, 2017c).

In another step to improve provider efficiency and increase access to care, including prescribing services, in 2016 the VA granted advance practice registered nurses (APRNs) practicing in the VA the authority to practice to the full extent of their education and training regardless of the state in which they are working (VA, 2016a). Previously, VA APRNs practiced under the supervision of a physician if practicing in a state that requires such oversight (Lowe, 2013). The policy change aligns with a recommendation by the Institute of Medicine in 2010 that APRNs should practice to the full extent of their education and training (IOM, 2010). The Institute of Medicine recommendation was not directed at the VA specifically.

Following the recovery model in which people in recovery are employed as part of the provider workforce can also help lessen the supply-versus-demand gap and make care more accessible and easier to navigate. The VA is currently doing this with its peer specialist program. That program employs veterans, who are in recovery for a mental health condition themselves, to serve as peer supports to other veterans receiving mental health care. Peer specialists in the VA can offer tools, resources, and navigational assistance to veterans in VA care. They serve as advocates for effective recovery-based services that will help a veteran readjust to civilian life (VA, 2013a). As mentioned in Chapter 10, peer specialists are an important asset in the delivery of patient-centered care.

³Public Law 114-2.

Research on the peer specialist program is sparse. However, Chinman et al. (2012) surveyed 92 VA local recovery coordinators about their perceptions of the peer specialist program. More than half of those interviewed (62 percent) reported finding it more difficult to hire peer specialists than to hire other VA employees. Support from both clinical and administrative leadership did help facilitate hiring, the respondents reported, but a lack of funding was an often reported barrier (53 percent). Many open-ended responses reported difficulty with the VA's human resources department regarding hiring a veteran with a mental illness. In some cases, the local recovery coordinators reported the human resources department ultimately chose to hire veterans without the lived experience of mental illness, which undermined the peer specialist role. Just over half of the local recovery coordinators (51 percent) reported that the peer specialist implementation was going well. Nearly all (96 percent) said that peer specialists were having a positive impact on veterans' care (Chinman et al., 2012).

In another study, Chinman et al. (2015) evaluated patient outcomes in a cluster randomized controlled trial of VA patients receiving care from intensive case management teams. The study compared the outcomes of veterans receiving intensive case management with a peer specialist to those without a peer specialist. The peer specialists developed relationships with their assigned veterans and completed a range of case management duties including medication delivery, accompanying veterans to appointments, developing recovery plans, meeting with veterans individually, leading or co-leading groups, engaging veterans with services, and assisting intensive case management teams. Patient outcomes were measured using a variety of instruments, including the recovery self-assessment, the Mental Health Recovery Measure, the Illness Management Recovery Scale, the Quality of Life Instrument-Brief Version and the Patient Activation Measure (PAM). While most outcomes were not different between the two groups, veterans in the peer specialist group did score marginally (but significantly) higher on the PAM after 1 year of treatment than veterans in the treatment-as-usual group. The PAM measures a patient's knowledge, skill, and confidence in self-care management. While the improvement among participants in the peer specialist group was slight (approximately 1 point), it was enough to predict improved health care use (Chinman et al., 2015).

Quality of Mental Health Providers in the Veterans Health Administration

Workforce recruitment, retention, and compensation described above affect the VA's capacity to provide access to specialized clinical knowledge and expertise that meets patients' expectations. In Donabedian's paradigm for the evaluation of health care quality, there are two elements in the performance of providers, one of them technical and the other interpersonal (Donabedian, 1988). Technical performance is the knowledge and judgment used in decisions about appropriate strategies of care as well as the skills required to carry out those strategies. The nature of the interpersonal relationship between a provider and patient plays a key role in the success of the technical care provided.

Studies show that training providers in evidence-based practices (EBPs) enhances technical quality through increasing clinical competencies, enhancing self-efficacy, and improving knowledge and attitudes (IOM, 2001; Karlin and Cross, 2014). Studies on the interpersonal aspects of the doctor-patient relationship consistently find that patients value personal care, as characterized by good communication skills, empathy, and caring, when evaluating the care they receive (Cleary and McNeil, 1988). Presented below is an overview of the VA's provider training in EBPs, followed by a summary of findings from the committee's site visit and survey research about providers' and patients' perspectives on the experience of care at the VA.

TABLE 8-3 Psychotherapies in VA Dissemination and Implementation Model

Evidence-Based Psychotherapy ^a	Condition
Cognitive processing therapy	Posttraumatic stress disorder (PTSD)
Prolonged exposure therapy	
Cognitive behavioral conjoint therapy for PTSD	Depression
Cognitive behavioral therapy for depression	
Interpersonal therapy for depression	
Acceptance and commitment therapy for depression	Substance use disorders
Motivational enhancement therapy	
Cognitive behavioral therapy for substance use disorders	Motivation for treatment and adherence
Motivational interviewing	
Integrated behavioral couples therapy	Relationship distress
Social skills training, behavioral family therapy	Serious mental illness
Cognitive behavioral therapy for pain	Chronic pain
Cognitive behavioral therapy for insomnia	Insomnia
Problem solving training	Problem-solving skills

^aChapter 4 provides a description of several of the treatments referenced here.

SOURCE: VA, 2017e.

Training in Evidence-Based Practices

The VA's psychotherapy dissemination and implementation model, launched in 2006, is a leading example of successful postgraduate training in evidence-based practices (IOM, 2015). The VA has 15 different EBP training programs⁴ in psychotherapy, which are helping to increase the availability of these treatments for veterans. Table 8-3 shows these therapies and the conditions they address. As of FY 2012, the VA had provided training in one or more evidence-based psychotherapies to more than 6,400 VA providers (Karlin and Cross, 2014). As of June 2017, this number had grown to over 11,900 unique clinicians trained in one or more of these therapies (VA, 2017e). In addition to these training programs in psychotherapy, a training pilot program is under way to train clinicians at 20 VHA sites across the country in the use of repetitive transcranial magnetic stimulation for major depressive disorder (VA, 2017e).

The VA's training programs in evidence-based psychotherapies are generally targeted at licensed independent providers: psychologists, psychiatrists, social workers, and mental health nurses as well as licensed professional mental health counselors and marriage and family therapists. To receive training, providers have to formally apply to a training program and meet eligibility criteria, such as having spent a significant amount of time treating the condition. Regional mental health directors coordinate the nomination and selection process with local medical centers and clinics and with national training program staff. Each VISN, or region, is provided with a specific number of training slots for which the VISN may nominate staff.

The training consists of formal instruction on the various psychotherapies and on-the-job guidance in the clinical setting. VA's transition to innovative training models began in FY 2015 in order to meet the increased need for improved access to training. This transition has included a move to regional and blended learning models, which has increased access to competency-based training, which involves either attending in-person VISN-level or virtual didactic and experientially based training and ongoing telephone-based consultation (VA, 2017e).

⁴Factors in the selection of specific therapies for dissemination across the VA include the efficacy and effectiveness of the therapy, its recommendation in clinical practice guidelines, its clinical utility in the veteran population, and the feasibility of its implementation in the VHA (Karlin and Cross, 2014).

VA's use of expert consultants in its training program is consistent with research on training methods. Interactive participation and feedback enhance the effectiveness of training workshops, and the impact of a program is increased when the training is supplemented by on-the-job coaching and consultation (Ruzek and Rosen, 2009). The passive dissemination of clinical guidelines or treatment manuals through traditional workshops or lectures does not have a significant impact on clinical practices (BootsMiller et al., 2004; Rosen et al., 2004; Ruzek and Rosen, 2009).

Assessments of Provider Training in Evidence-Based Practices

A few studies have examined whether the VA's training initiative enabled clinicians to effectively deliver two evidence-based psychotherapies for PTSD—cognitive processing therapy (CPT) and prolonged exposure (PE) therapy. A study of the VA PE training program involving 1,931 veterans treated by 804 trainee clinicians showed, in a pre- and post-treatment analysis of symptoms, that trainees could effectively use PE to reduce PTSD and co-occurring depression symptoms in male and female veterans (Eftekhari et al., 2013). A similar analysis among veterans who received CPT from newly trained therapists also showed a reduction in PTSD symptoms (Chard et al., 2012). In addition, a study of 3,000 PE training cases in the VA demonstrated that positive patient outcomes were achieved by providers of every profession, theoretical orientation, level of clinical experience in treating PTSD, and prior PE training experience (Eftekhari et al., 2015).

In 2011 the VA Office of Inspector General reviewed documentation of PTSD training among a random sample of 28 Vet Center facilities (VA, 2011). Approximately 85 percent of Vet Center providers had attended PTSD training required by readjustment counseling services, and 53 percent of the providers had attended VA-sponsored PTSD training. In addition, some Vet Center providers received supplemental training in evidence-based therapy.

The VA has trained thousands of providers on EBP to the benefit of veterans, but building and sustaining sufficient numbers of trained providers over time will be a challenge. Training is time-intensive and expensive, which will require VA to explore more efficient and scalable training procedures (e.g., relying on local trainers, online training, Internet-based interactive training) to grow capacity. However, the researchers caution that the adoption of less resource-intensive training models must be preceded by research establishing that alternative training models do not inadvertently dilute the effectiveness of EBPs (Rosen et al., 2016).

Veteran and Provider Perceptions of Provider Quality

As mentioned above, patients in general place a high value on the interpersonal aspects of the doctor–patient relationship when evaluating the care they receive. Results from VA's Veterans Satisfaction Survey (VSS), the VA's annual survey of veterans served by the VA, also suggest veteran satisfaction with VA mental health providers. Veterans were asked to rate the statement, "I am satisfied with my mental health team," using a scale of 1 to 5, where 1 is strongly disagree, 5 is strongly agree, and 3 is neither. For FY 2016,⁵ the VA reported a mean rating of 3.98 (SD = 1.15) for OEF and OIF respondents (VA, 2016b), which seems to indicate some agreement with this statement. (See Chapter 15 for details about the VSS.) Results from the committee's site visit and survey research show that this corresponds with reports from the veterans responding to the survey and interviewed.

Data from the committee's survey show that a large majority of veterans have had a positive experience with VA mental health providers. Among those veterans who used VA mental health services,

⁵The FY 2016 report reviewed by the committee covers survey data collected through June 2016.

63 percent indicated that their VA mental health provider helped them either some or a lot, and 61 percent were at least somewhat satisfied with the care they received. These results are discussed in more detail in Chapter 10, which addresses patient-centered care (see Table 10-1).

Both VA users and non-VA users who have mental health needs⁶ rated their providers positively across the following four questions (see Table 8-4):

- My mental health provider understands my background and values.
- I feel welcome at my mental health provider's office.
- My mental health provider looks down on me and the way I live my life.
- I never have a hard time communicating with my mental health provider because of accents or language barriers.

Notably, the responses to each of the questions were similar across the user groups, indicating that user experiences and veterans' perceptions of providers are similar regardless of where the veteran seeks care.

Tables 8-5 and 8-6 reflect perceptions concerning the availability of mental health services offered by VA providers among veterans who have mental health needs. Among all veterans (all user groups), 38 percent either somewhat or strongly agreed that a VA provider in their area offered all the mental health care services veterans need, although a notable number of veterans were not sure (40 percent). The percentage of those who somewhat or strongly agreed varied across user groups (see Table 8-6); 64 percent of VA users somewhat or strongly agreed that the needed services are available from a VA provider in their area. However, only 20 percent of veterans who used non-VA providers agreed, and only 30 percent of non-users of any services agreed. Notably, large percentages of veterans who used non-VA providers (58 percent) and non-users (51 percent) were not sure if VA providers in their areas offered needed mental health services. This suggests that perhaps one reason that users of non-VA services and non-users choose to not use the VA for mental health care is simply that they do not know if a provider is offering the services they need in their area.

Table 8-7 shows that among VA users, 74 percent strongly or somewhat agreed that one can see the same mental health care provider on most visits to the VA. Veterans with a need for mental health services who used non-VA providers had the lowest level of agreement with this statement (8 percent), although a vast majority of these veterans were not sure (79 percent). Most veterans who were not users of any mental health service, either VA or non-VA (75 percent), also were not sure if they could see the same VA provider on most visits.

Among veterans unlikely to use VA mental health services in the future, 19 percent agreed that "VA doctors/staff did not provide good quality treatment." Slightly fewer would not use VA mental health services in the future (15 percent) because of a bad prior experience using VA; 8 percent cited a lack of improvement after using services in the past as a reason for not using it in the future. The full set of reasons surveyed and veteran responses can be reviewed in Chapter 6, Table 6-31.

Many veterans interviewed on the site visits reported positive experiences with VA providers. While veterans often were unable to identify the specific treatment modalities they had experienced, they credited the actions and attitudes of their therapists as being the reason for their improvement:

[My therapist] has told me call him any time of the day, weekends . . . No matter what he's doing, he'll set time aside. [Altoona, Pennsylvania]

⁶As described in Chapter 6, a veteran was classified as having a need for mental health care if the result on at least one mental health screener was positive or if the veteran reported receiving a mental health diagnosis from a health care provider in the past 24 months.

TABLE 8-4 Among OEF/OIF/OND Veterans Who Have Mental Health Need, VA and Non-VA Users' Experiences of Mental Health Care

Experience of Care	All OEF/OIF/OND Veterans				VA Users				Non-VA Users			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE%	Unwgt n	Wgt N	Wgt %	SE%
Total	1,105	749,453	-	-	849	476,654	-	-	256	272,799	-	-
<i>My mental health provider understands my background and values</i>	785	535,295	71.4%	1.6%	592	327,702	68.8%	1.8%	193	207,594	76.1%	3.1%
<i>I feel welcome at my mental health provider's office</i>	887	599,396	80.0%	1.4%	676	375,206	78.7%	1.7%	211	224,190	82.2%	2.6%
<i>My mental health provider looks down on me and the way I live my life</i>	880	587,951	78.5%	1.7%	670	365,392	76.7%	1.9%	210	222,559	81.6%	3.1%
<i>I had a hard time communicating with my mental health provider because of accent or language barrier</i>	876	602,821	80.4%	1.7%	649	359,523	75.4%	1.9%	227	243,299	89.2%	2.5%
Never												

NOTE: SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.
SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 8-5 Among OEF/OIF/OND Veterans Who Have Mental Health Needs, Perceived Local Availability of Mental Health Services

	All OEF/OIF/OND Veterans Who Have Mental Health Need			
	Unwgt n	Wgt N	Wgt %	SE %
<i>There is a VA provider in my area that offers all of the mental health services Veterans need</i>				
Strongly or somewhat disagree	439	346,892	20.4	1.0%
Strongly or somewhat agree	929	650,261	38.3	1.3%
Not sure	619	685,264	40.3	1.1%

NOTE: SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

The one mental health provider who really cared . . . if it wasn't for her, I probably wouldn't be here.
[Hampton, Virginia]

It was the interpersonal skills of these therapists that left a positive impression for the veterans. In particular, “respect,” “caring,” and “going the extra mile” were things that stood out for veterans as important to establishing a trusting relationship.

Veterans who were less sanguine about their experience with VA providers conveyed to the committee their sense that providers are under pressure to keep patients “flowing” through the system. Site visitors heard from numerous interviewees who felt that their treatment had been terminated prematurely because they were not getting better quickly enough. One female veteran, for example, described her reaction to being dropped by her therapist:

Everybody's on a different pace. Don't tell me because you've been seeing me for a year that you can no longer see me because of your caseload. [Biloxi, Mississippi]

Veterans also frequently described appointments with clinicians that felt too brief to be of any value, either to the clinician (who might want a little more information) or to the veteran (who might want to share a little more). The following quotes are illustrative and indicate that many veterans believe that systemic strains are the reason for the brevity:

[The doctor] she's like, “I don't want to hear any of your problems. How are your meds doing?” . . . I don't blame her for that. I blame the system on it. [Biloxi, Mississippi]

Another thing I find with the VA is like, “OK, I got 30 minutes to deal with you.” Whatever your issue is, if people don't get it in 30 minutes, “Oh, well. I'll catch you next time.” [Temple, Texas]

Similarly, VA providers' also voiced concerns about the high demand for services and its impact on the quality of care they are able to provide and on their choices about which patients to prioritize, as the following quotes illustrate:

I think it's hard for me to feel like I'm providing good patient care when I can only see someone once a month for therapy. [Topeka, Kansas]

TABLE 8-6 Among OEF/OIF/OND Veterans Who Have Mental Health Needs, Perceived Local Availability of Mental Health Services, by User Group

	Subgroups of OEF/OIF/OND Veterans Who Have Mental Health Needs											
	VA Users				Non-VA Users				Non-Users			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
<i>There is a VA provider in my area that offers all of the mental health services Veterans need</i>	215	124,022	26.0%	1.9%	59	53,743	19.7%	3.4%	162	166,792	17.8%	1.6%
Strongly or somewhat disagree	552	306,314	64.3%	2.1%	64	55,787	20.4%	2.8%	309	282,933	30.2%	1.8%
Strongly or somewhat agree	78	44,254	9.3%	1.2%	130	159,451	58.4%	4.9%	406	474,909	50.7%	2.1%
Not sure												

NOTE: SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

TABLE 8-7 Among OEF/OIF/OND Veterans Who Have Mental Health Needs, Reported Ability to See the Same Mental Health Provider, by User Group

	Among OEF/OIF/OND Veterans Who Have Mental Health Need by Level of Agreement											
	Strongly or Somewhat Agree				Strongly or Somewhat Disagree				Not Sure/Refused			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
<i>At the VA, you can see the same mental health provider on most visits</i>	816	509,161	30.0%	1.1%	247	181,931	10.7%	0.8%	889	972,445	57.2%	1.1%
All OEF/OIF/OND veterans who have mental health need	629	350,699	73.6%	1.7%	123	70,470	14.8%	1.3%	76	44,175	9.3%	1.1%
VA users	33	22,730	8.3%	1.9%	36	28,409	10.4%	1.9%	178	214,754	78.7%	2.3%
Non-VA users	153	133,697	14.3%	1.1%	88	83,052	8.9%	0.9%	625	703,377	75.1%	1.3%
Non-users												

NOTE: SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

If I saw a new patient, and I want to see them back in 2 or 3 weeks . . . We couldn't see them back for like 6 weeks. When [my supervisor and I] were talking about it, he's like, "That's not appropriate. You need to see them back sooner." [Altoona, Pennsylvania]

The committee heard from VA providers who expressed uneasiness about the care that community providers give to veterans through the Veterans Choice program:

I want to say one more thing about the Choice Act . . . and I trained a countless number of mental health providers in our community. They are not equipped. They are clueless about what we see day in and day out. [Cleveland, Ohio]

There are thousands of providers out there . . . it could be some person who has never seen or met a veteran before or knows about PTSD or evidence-based treatment. [San Diego, California]

Chapter 9 presents more details about the Veterans Choice program, including and additional site visit findings about this program.

PHYSICAL INFRASTRUCTURE

As noted in Chapter 2, the VA health care system includes more than 150 VAMCs, 780 community-based outpatient centers (CBOCs), and 130 nursing homes (Watkins et al., 2011). The VA operates out of both VA-owned and VA-leased properties. In Assessment K of the 12 independent assessments of the VA, as directed by the Veterans Access, Choice, and Accountability Act of 2014, McKinsey & Company, Inc. examined the VA's processes for carrying out the construction and maintenance of its medical facilities (McKinsey & Company Inc., 2015). The assessment, which takes into account all VA medical facilities, not only those involved in mental health care services, reports that the VA has a medical facilities budget of about \$6 billion per year. Of that amount, major, minor, and nonrecurring maintenance construction cost about \$2 billion per year; the annual operation lease obligation budget is about \$0.5 billion per year; and reoccurring maintenance, plant operations, and other facility management cost about \$3.5 billion year. The major finding from the assessment is that the VA "is expected to face accelerating and likely unfunded capital requirements driven by maintenance to aging infrastructure, projected workload needs to serve the veteran population, and inefficient capital management" (McKinsey & Company Inc., 2015, p. IV). As noted above, Assessment G of the independent assessment of the VA found that some VA facilities had insufficient examination space, which negatively affected provider productivity and, therefore, patient access to timely services (Grant Thornton LLP, 2015). Furthermore, GAO identified clinical space constraints at some VA facilities as an impediment to being able to get new mental health providers in place (GAO, 2015).

VA buildings are, on average, nearly 60 years old and 449 VA buildings are from the Revolutionary and Civil wars (96 of which are vacant). Only half of all facilities have been built since 1920. In all, more than 400 VA buildings are vacant and 735 are underutilized, costing tax payers \$25 million a year (VA, 2017g). In 2017, the VA reported that its own assessments had identified critical infrastructure deficiencies in need of remediation totaling more than \$18 billion throughout the system. The needed improvements included structural seismic, electrical distribution, and mechanical systems (VA, 2017g). While the VA does have processes in place to identify and address both capital and non-capital solutions to infrastructure needs throughout the system, it acknowledges that the primary challenge is having sufficient funding to address all the capital requirements throughout the system (VA, 2017e).

The sections below on VA facilities—specifically relating to veterans’ experiences with obtaining mental health care services—are drawn from the site visit data collected by the committee. The committee did not find a body of existing literature on topics such as ease of parking at VA facilities and veterans’ comfort levels inside VA facilities.

Parking

Veterans and VA clinicians both reported during the committee’s site visits that the VA facilities themselves have barriers that prevent veterans from seeking treatment or having a positive experience while doing so. For example, inadequate parking was a complaint at nearly all of the VAMCs that were visited on the site visits conducted for this study, and nearly half of all veterans surveyed did not think parking was readily available (see Table 8-7). Veterans told numerous stories about being late to appointments because they could not find a parking space or of becoming so agitated driving around looking for parking that they simply left and never attended that appointment. Clinicians said that they often have to waste precious appointment time calming a veteran down from his or her parking frustrations before it is even possible to move on to the actual reason for the appointment. As one VA clinician reported:

You spend the first 15 minutes diffusing them from the frustration with the parking situation. You haven’t even started the therapy. The parking is a nightmare. [San Diego, California]

To alleviate the parking issue, some VAMCs have moved to having satellite parking lots and then shuttling patients to the VAMC. However, as VA clinicians noted, this is not an acceptable solution for clients in crisis. Complaints about parking at VAMCs were often followed by praise for CBOCs and Vet Centers, both of which are smaller locations that generally have much more available parking.

Facility Environment

The committee survey explored veteran perceptions of VA mental health facilities. Table 8-8 reports the results for all of the features surveyed among OEF/OIF/OND veterans with mental health needs. Among VA users, a large majority found the cleanliness to be excellent or very good for the reception/waiting area (86 percent), for the restrooms/lavatory (82 percent), and for the building overall (76 percent). This is in contrast to more negative opinions about the facilities that the committee heard on the site visits (described below). However, the survey responses on parking were similar to what the committee heard on its site visits, with only 52 percent of VA users rating the availability of parking as excellent or very good.

In addition to the frustration of inadequate parking, veterans interviewed on the site visits described other aspects of their experiences inside VHA facilities. Veterans reported that being in large, crowded places made them uncomfortable. VHA hospitals are large, crowded areas with aisles and hallways that prevent them from having a clear view of their surroundings. VAMCs also reportedly felt militaristic, adding to veteran stress. Comments related to these issues included:

Part of PTSD is avoiding crowds. Well, this clinic is a crowd. [VHA clinician – Biloxi, Mississippi]

The VA, I feel afraid to go there. I don’t know my safe spots. I don’t know anybody that could help me. I prefer not to even approach it. [veteran – El Paso, Texas]

As with parking, CBOCs and Vet Centers were generally seen more positively. In particular, they were praised as more comfortable locations to seek treatment because they are smaller, less crowded facilities.

TABLE 8-8 Among OEF/OIF/OND Veterans Who Have Mental Health Needs, VA and Non-VA Users' Perceptions of the VA Facility

Perceptions of the VA Facility	All OEF/OIF/OND Veterans				VA Users				Non-VA Users			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Total	2,007	1,705,168	-	-	849	476,654	-	-	256	272,799	-	-
<i>Cleanliness of reception/ waiting area</i>												
Excellent/very good	1,107	752,348	44.3%	1.1%	715	407,969	85.6%	1.3%	92	77,073	28.3%	3.5%
<i>Cleanliness of restroom/ lavatory</i>												
Excellent/very good	1,062	726,223	42.7%	1.2%	676	388,346	81.5%	1.4%	86	73,635	27.0%	3.2%
<i>Availability of parking</i>												
Excellent/very good	699	499,163	29.4%	1.0%	420	245,379	51.5%	1.9%	63	56,383	20.7%	3.1%
<i>Building overall (attractiveness, quality of building maintenance and upkeep)</i>												
Excellent/very good	1,046	723,364	42.6%	1.0%	642	361,252	75.8%	1.7%	90	77,226	28.3%	2.6%

NOTES: Response options included excellent, very good, good, fair, poor, and don't know. SE = standard error of percentage; Unwgt = unweighted; Wgt = weighted.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Some clinicians (both at VAMCs and at CBOCs) commented that even their offices and other treatment rooms were not designed with mental health patients in mind. One clinician described it in this manner,

Sometimes they don't like their backs to the windows or backs to the doors . . . it looks like design features weren't considered necessarily. [San Diego, California]

The VA is currently working with mental health field representatives and a consulting group to update its design-guide standards for state-of-the-art mental health facilities. The guide will specify “how to make mental health treatment settings warm, inviting, and patient-centered” (VA, 2017e, p. 15).

GEOGRAPHIC ACCESS

Sufficient geographic access to care requires that users be within reasonable proximity to health facilities that provide needed services, in person or through a telemedicine method that is acceptable to users. Existing barriers to geographic access to care and health disparities between rural and urban communities have been well documented (IOM, 2005). Health care in rural populations poses a variety of challenges, such as limited availability of specialized providers, limited options for assessment and treatment referrals, and a lack of cultural awareness among providers (Richardson et al., 2009). Rural veterans are less likely than urban veterans to access mental health services because they face challenges such as greater distance and travel time and have few (if any) public transportation options. In some cases, a veteran may be located within reasonable proximity to a VA facility, but that facility may not offer the needed service. In such a case, the veteran may have to travel a much farther distance than the distance to the closest facility to receive needed care. The Veterans Choice Program was designed in part to address this issue by offering veterans more convenient options when seeking services. If a VA provider is not within a 40-mile drive of a veterans' home, the Veterans Choice Program permits the veteran to seek care from an approved non-VA provider. According to the VA's Office of Rural Health, 2.9 million out of 5.5 million rural veterans are enrolled in the VA health care system. One-third of all veterans enrolled in VA services live in rural locations (VA, 2017f). About 12 percent of VA-enrolled rural veterans served in OEF and OIF.

Studies have shown that VA patients in rural areas have more physical comorbidities and worse health-related quality of life than those residing in suburban or urban settings. In addition, they have reduced access to health services and fewer alternatives to VA care (Weeks et al., 2004; West and Weeks, 2006), and they use services at a lower rate than their urban counterparts (Teich et al., 2016). Compared to urban and suburban veterans, rural veterans live further from private-sector and VA hospitals, have access to fewer mental health and specialty services, and visit their providers less frequently, while at the same time having more physical and mental health problems (Weeks et al., 2004). Among veterans seeking treatment for serious mental illness, travel distance has been found to be the strongest predictor of poor service (McCarthy et al., 2006). Furthermore, as travel distance increases, retention tends to decrease for alcohol abuse treatment, especially among older and younger veterans (but less so among the middle aged) (Fortney et al., 1995).

In a study comparing the use of mental health treatment among veterans with a mental health condition in rural areas versus those living in urban areas, Teich et al. (2016) found that veterans in rural areas were 70 percent less likely to receive any mental health treatment than those in urban areas. Rural veterans were 52 percent less likely to receive outpatient treatment and 64 percent less likely to receive prescription medication than urban-dwelling veterans with mental health conditions (Teich et al., 2016).

Brooks et al. (2012) evaluated outpatient service use by rural veterans with PTSD compared with their urban counterparts. Data were obtained for 415,617 veterans with PTSD who received outpatient care at a VA facility. The results indicated that veterans from rural and highly rural areas had, respectively, 19 percent (95% confidence interval [CI] = 0.80–0.82) and 25 percent (95% CI = 0.72–0.79) fewer outpatient visits than those who lived in urban settings. The results are similar for visits to specialized PTSD clinics, with 12 percent fewer visits (mean = 2.17; incidence rate ratio [IRR] = 0.88, 95% CI = 0.87–0.89) for those in rural and 33 percent fewer visits (mean = 1.66; IRR = 0.67, 95% CI = 0.64–0.71) for those in highly rural areas compared to their counterparts in urban areas. Service use was contingent on proximity to services, with a larger effect seen for those veterans requiring specialized mental health care (Brooks et al., 2012).

In a similar comparison, Mott et al. (2014) evaluated the change in psychotherapy use over time in rural and urban veteran populations. The authors evaluated data from the VA National Patient Care Database outpatient treatment files for all veterans who received a new-onset diagnosis for depression, anxiety, or PTSD at a VA outpatient facility between FY 2007 and FY 2010. The authors found that rural veterans were less likely to receive psychotherapy than their urban counterparts. Telepsychotherapy use was low among both groups (less than 1 percent). Over time, however, the use of individual, in-person psychotherapy grew significantly among both rural and urban veterans and the disparity between the two groups slightly decreased. From 2007 to 2010, the proportion of rural veterans receiving any psychotherapy increased from 17 to 22 percent. Among urban veterans it increased from 24 to 28 percent (Mott et al., 2014). Similarly, the proportion of rural veterans receiving eight or more psychotherapy visits increased from 2.4 to 4.3 percent between 2007 and 2010. Among urban veterans it increased from 5.5 to 7.0 percent during the same period. While the rural–urban gaps decreased between 2007 and 2010 for psychotherapy, for other mental health services, such as medication management and case management, the use increased among both rural and urban groups, but the disparity between the two groups persisted.

Aside from affecting the use of mental health care, rural status may also affect the type of mental health treatment given when services are utilized. Pfeiffer et al. (2011) evaluated how driving distance to VA services affected service usage and modes of treatment among a sample of veterans with a depression diagnosis. The authors found that, compared to veterans living within 30 miles of the nearest VA mental health facility, veterans with depression living between 30 and 60 miles from the nearest VA mental health facility were less likely to receive psychotherapy (odds ratio [OR] = 0.71; 95% CI = 0.66–0.76) but more likely to receive pharmacotherapy (OR = 1.27; 95% CI = 1.22–1.33). The authors suggest that this finding may indicate that providers and patients may consider geographic barriers to care when deciding on treatment options.

Buzza et al. (2011) evaluated how geographical distance to care is a barrier to health care services (although not specifically to mental health care) among rural veterans. The authors assessed this barrier through surveys ($n = 96$ patients, 88 providers/staff), interviews (42 patients, 64 providers/staff), and focus groups ($n = 7$, consisting of providers and staff) at 15 VA primary care clinics in the Midwest (VISN 23). “Distance to drive” was the most frequently selected barrier by patient and provider; other barriers included travel-related challenges such as time, limited transportation, and cost or expense. Veterans indicated that the same travel distance was more burdensome when they were seeking care for routine services (for example, laboratory, podiatry) as compared to specialty care (for example, cardiology, neurology) (Buzza et al., 2011).

Rural veterans may face disparities when compared to urban-dwelling veterans that are not necessarily related to their physical distance from services. For example, numerous studies have noted an increased risk of suicide for people living in rural areas (Kapusta et al., 2008; Levin and Leyland, 2005; Middleton et al., 2003; Razvodovsky and Stickley, 2009; Singh and Siahpush, 2002). McCarthy et al.

(2012) examined rural–urban differences in suicide rates in a population of veterans receiving services in the VA health system. Suicide mortality was assessed in two periods: FY 2004–2005 and FY 2007–2008; and suicide risks were assessed for two cohorts—those that had VA inpatient encounters in those time periods and those who had VA outpatient encounters. Median distance to the nearest VA mental health provider was greater for patients in rural areas. In the two cohorts, residence in rural areas was associated with an increased rate of suicide and increased suicide risk; however, the distance measures were not necessarily related to suicide risk. This finding suggests that the elevated suicide risks observed among rural populations might have less to do with health system accessibility barriers and more to do with socioeconomic or sociocultural factors.

SUMMARY

This chapter outlined the workforce and facilities-related issues affecting access to mental health care services at the VA. A summary of the committee’s findings on this topic is offered here.

- The VA is the largest training program for health professionals in the United States.
- The VA experiences significant shortages of mental health providers due to widespread national shortages of mental health professionals, lengthy and inefficient hiring processes, and high turnover in some areas.
- Excessive workloads and bureaucratic stressors contribute to mental health staff burnout, which negatively affects both staff retention and the quality of patient–provider relationships.
- A number of incentive and training programs are in place to help circumvent some of these staffing problems and to streamline the hiring process, although not all provider groups are eligible for all of them. These include the Education Debt Reduction Program, the Mental Health Education Expansion program, and others.
- The VA is also using a wider variety of types of mental health professionals and paraprofessionals, such as peer advocates, to address staffing needs, and it is implementing efforts to eliminate barriers to their professional staff to work at the top of their licensure.
- The VA has trained its mental health providers in evidence-based practices as one way to enhance provider quality and expertise.
- The VA uses effective training methods and has trained a significant percentage of clinicians.
- In addition to valuing technical expertise, veterans place a high value on the interpersonal relationship they have with their mental health providers.
- Overall, veterans’ perceptions of providers across both of these domains (technical expertise and interpersonal relationships) were positive.
- A notable number of non-VA users and non-users of mental health services reported that they did not know if needed services were available in their area.
- On the site visits, veterans and providers acknowledged the effects of managing high patient load on provider–patient interactions.
- Physical infrastructure issues such as a lack of office and exam room space, insufficient parking at VAMCs, and aging buildings affect both access to care and the quality of the patient experience.
- Veterans in rural locations may be less likely to receive mental health services than those who reside in urban locations. Rural veterans who do seek care may be more likely to receive pharmacotherapy and less likely to receive psychotherapy than their urban counterparts.

REFERENCES

- Annapolis Coalition on the Behavioral Health Workforce. 2007. *Action plan on the behavioral health workforce*. Washington, DC: Annapolis Coalition on the Behavioral Health Workforce.
- BLS (Bureau of Labor Statistics). 2016. *Occupational outlook handbook*. <http://www.bls.gov/ooh/community-and-social-service/mental-health-counselors-and-marriage-and-family-therapists.htm#tab-1> (accessed September 13, 2016).
- BootsMiller, B. J., J. W. Yankey, S. D. Flach, M. M. Ward, T. E. Vaughn, K. F. Welke, and B. N. Doebbeling. 2004. Classifying the effectiveness of Veterans Affairs guideline implementation approaches. *American Journal of Medical Quality* 19(6):248–254.
- Brooks, E., D. K. Novins, D. Thomas, L. Jiang, H. T. Nagamoto, N. Dailey, B. Bair, and J. H. Shore. 2012. Personal characteristics affecting veterans' use of services for posttraumatic stress disorder. *Psychiatric Services* 63(9):862–867.
- Buzza, C., S. S. Ono, C. Turvey, S. Wittrock, M. Noble, G. Reddy, P. J. Kaboli, and H. S. Reisinger. 2011. Distance is relative: Unpacking a principal barrier in rural healthcare. *Journal of General Internal Medicine* 26(2 Suppl):648–654.
- Chard, K. M., E. G. Ricksecker, E. T. Healy, B. E. Karlin, P. A. Resick. 2012. Dissemination and experience with cognitive processing therapy. *Journal of Rehabilitation Research and Development* 49(5):667–678.
- Chinman, M., M. Salzer, and D. O'Brien-Mazza. 2012. National survey on implementation of peer specialists in the VA: Implications for training and facilitation. *Psychiatric Rehabilitation Journal* 35(6):470–473.
- Chinman, M., R. S. Oberman, B. H. Hanusa, A. N. Cohen, M. P. Salyers, E. W. Twamley, and A. S. Young. 2015. A cluster randomized trial of adding peer specialists to intensive case management teams in the Veterans Health Administration. *Journal of Behavioral Health Services & Research* 42(1):109–121.
- Cleary, P. D., and B. J. McNeil. 1988. Patient satisfaction as an indicator of quality for care. *Inquiry* 25:25–36.
- Donabedian, A. 1988. The quality of care. How can it be assessed? *JAMA* 260(12):1743–1748.
- Eftekhari, A., J. I. Ruzek, J. J. Crowley, C. S. Rosen, M. A. Greenbaum, and B. E. Karlin. 2013. Effectiveness of national implementation of prolonged exposure therapy in Veterans Affairs care. *JAMA Psychiatry* 70(9):949–955.
- Eftekhari, A., J. J. Crowley, J. I. Ruzek, D. W. Garvert, B. E. Karlin, and C. S. Rosen. 2015. Training in the implementation of prolonged exposure therapy: Provider correlates of treatment outcome. *Journal of Traumatic Stress* 28(1):65–68.
- Fortney, J. C., B. M. Booth, F. C. Blow, and J. Y. Bunn. 1995. The effects of travel barriers and age on the utilization of alcoholism treatment aftercare. *American Journal of Drug & Alcohol Abuse* 21(3):391–406.
- GAO (Government Accountability Office). 2015. *VA mental health: Clearer guidance on access policies and wait-time data needed*. Washington, DC: Government Accountability Office.
- GAO. 2016. *Veterans Health Administration: Management attention is needed to address systemic, long-standing human capital challenges*. Washington, DC: Government Accountability Office.
- GAO. 2017. *VA Health care: Improvements needed in data and monitoring of clinical productivity and efficiency*. Washington, DC: Government Accountability Office.
- Garcia, H. A., C. A. McGeary, D. D. McGeary, E. P. Finley, and A. L. Peterson. 2014. Burnout in Veterans Health Administration mental health providers in posttraumatic stress clinics. *Psychological Services* 11(1):50–59.
- Garcia, H. A., C. A. McGeary, E. P. Finley, N. S. Ketchum, D. D. McGeary, and A. L. Peterson. 2015. Burnout among psychiatrists in the Veterans Health Administration. *Burnout Research* 2(4):108–114.
- Grant Thornton LLP. 2015. *Assessment G (staffing/productivity/time allocation)*. Chicago: Grant Thornton LLP.
- HRSA (Health Resources and Services Administration) Data Warehouse. 2016. *Shortage areas*. <http://datawarehouse.hrsa.gov/topics/shortageAreas.aspx> (accessed January 6, 2016).
- IOM (Institute of Medicine). 2001. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.
- IOM. 2005. *Quality through collaboration: The future of rural health care*. Washington, DC: The National Academies Press.
- IOM. 2010. *The future of nursing: Leading change, advancing health*. Washington, DC: The National Academies Press.
- IOM. 2015. *Psychosocial interventions for mental and substance use disorders: A framework for establishing evidence-based standards*. Washington, DC: The National Academies Press.
- Jones, K. R., S. D. Pommer, and D. Latini. 2015. Mental health training in the Veterans Health Administration: History and recent expansion: Presentation to the committee. Paper read at IOM Committee Meeting 8, September 11, Washington, DC.
- Kapusta, N. D., A. Zorman, E. Etzersdorfer, E. Ponocny-Seliger, E. Jandl-Jager, and G. Sonneck. 2008. Rural-urban differences in Austrian suicides. *Social Psychiatry & Psychiatric Epidemiology* 43(4):311–318.
- Karlin, B. E., and G. Cross. 2014. From the laboratory to the therapy room: National dissemination and implementation of evidence-based psychotherapies in the U.S. Department of Veterans Affairs health care system. *American Psychologist* 69(1):19–33.

- Levin, K. A., and A. H. Leyland. 2005. Urban/rural inequalities in suicide in Scotland, 1981–1999. *Social Science & Medicine* 60(12):2877–2890.
- Lowes, R. 2013. VA proposes independent status for all advanced practice RNs. *Medscape Medical News*. <http://www.medscape.com/viewarticle/810982> (accessed January 29, 2016).
- McCarthy, J. F., J. D. Piette, J. C. Fortney, M. Valenstein, and F. C. Blow. 2006. Outpatient visit chaining among patients with serious mental illness. *Medical Care* 44(3):257–264.
- McCarthy, J. F., F. C. Blow, R. V. Ignacio, M. A. Ilgen, K. L. Austin, and M. Valenstein. 2012. Suicide among patients in the Veterans Affairs health system: Rural–urban differences in rates, risks, and methods. *American Journal of Public Health* 102 (Suppl 1):S111–S117.
- McKinsey & Company Inc. 2015. *Assessment K (facilities)*. Washington, DC: McKinsey & Company.
- Middleton, N., D. Gunnell, S. Frankel, E. Whitley, and D. Dorling. 2003. Urban–rural differences in suicide trends in young adults: England and Wales, 1981–1998. *Social Science & Medicine* 57(7):1183–1194.
- Mott, J. M., K. M. Grubbs, S. Sangsiry, J. C. Fortney, and J. A. Cully. 2014. Psychotherapy utilization among rural and urban veterans from 2007 to 2010. *Journal of Rural Health* 31(3):235–243.
- Pfeiffer, P. N., J. Glass, K. Austin, M. Valenstein, J. F. McCarthy, and K. Zivin. 2011. Impact of distance and facility of initial diagnosis on depression treatment. *Health Services Research* 46(3):768–786.
- Richardson, L. K., B. C. Frueh, A. L. Grubaugh, L. Egede, and J. D. Elhai. 2009. Current directions in videoconferencing tele-mental health research. *Clinical Psychology* 16(3):323–338.
- Razvodovsky, Y., and A. Stickley. 2009. Suicide in urban and rural regions of Belarus, 1990–2005. *Public Health* 123(1):27–31.
- Rosen, C. S., H. C. Chow, J. F. Finney, M. A. Greenbaum, R. H. Moos, J. I. Sheikh, and J. A. Yesavage. 2004. VA practice patterns and practice guidelines for treating posttraumatic stress disorder. *Journal of Traumatic Stress* 17(3):213–222.
- Rosen, C. S., M. M. Matthieu, S. Wiltsey Stirman, J. M. Cook, S. Landes, N. C. Bernardy, K. M. Chard, J. Crowley, A. Eftekhari, E. P. Finley, J. L. Hamblen, J. M. Harik, S. M. Kehle-Forbes, L. A. Meis, P. E. Osei-Bonsu, A. L. Rodriguez, K. J. Ruggiero, J. I. Ruzek, B. N. Smith, L. Trent, and B. V. Watts. 2016. A review of studies on the system-wide implementation of evidence-based psychotherapies for posttraumatic stress disorder in the Veterans Health Administration. *Administration and Policy in Mental Health and Mental Health Services Research* 43(6):957–977.
- Ruzek, J. I., and R. C. Rosen. 2009. Disseminating evidence-based treatments for PTSD in organizational settings: A high priority focus area. *Behaviour Research & Therapy* 47(11):980–989.
- Singh, G. K., and M. Siahpush. 2002. Increasing rural–urban gradients in U.S. suicide mortality, 1970–1997. *American Journal of Public Health* 92(7):1161–1167.
- Staff Care. 2015. *Psychiatry: The silent shortage*. Dallas, TX: Staff Care.
- Teich, J., M. M. Ali, S. Lynch, and R. Mutter. 2016. Utilization of mental health services by veterans living in rural areas. *Journal of Rural Health* 33(3):297–304.
- Thomas, K. C., A. R. Ellis, T. R. Konrad, C. E. Holzer, and J. P. Morrissey. 2009. County-level estimates of mental health professional shortage in the United States. *Psychiatric Services* 60(10):1323–1328.
- VA (Department of Veterans Affairs). 2011. *Healthcare inspection: Post traumatic stress disorder counseling services at vet centers*. Washington, DC: VA Office of Inspector General.
- VA. 2013a. *Help fellow veterans: Become a VA peer specialist*. <http://www.blogs.va.gov/VAntage/9368/help-fellow-veterans-become-a-va-peer-specialist/> (accessed January 29, 2016).
- VA. 2013b. *VA handbook 5007/46: Pay administration*. Washington, DC: Department of Veterans Affairs.
- VA. 2015. *VA mental health education expansion, phase IV for academic year 2016–17: Establishment and/or expansion of psychology doctoral internships, postdoctoral neuropsychology residencies, and/or marriage and family therapy pre-degree internship*. https://www.va.gov/oaa/docs/RFP_MH_Education_Expansion_Phase_IV.pdf (accessed January 27, 2017).
- VA. 2016a. *Advance practice registered nurses: A rule by the Veterans Affairs department*. <https://www.federalregister.gov/documents/2016/12/14/2016-29950/advanced-practice-registered-nurses> (accessed January 11, 2017).
- VA. 2016b. *Mental Health Satisfaction Survey: Veteran Satisfaction Survey (VSS) National Results*. Department of Veterans Affairs.
- VA. 2016c. *National Mental Health Providers Survey: 2015*. Washington, DC: Department of Veterans Affairs, Office of Mental Health Operations.
- VA. 2016d. *VHA workforce and succession strategic plan 2016*. Washington DC: Department of Veterans Affairs.
- VA. 2017a. *Education debt reduction program*. Washington, DC: Department of Veterans Affairs.
- VA. 2017b. *FY 2017 retirement eligibility for mental health occupations*. Department of Veterans Affairs.
- VA. 2017c. *Hiring programs and incentives*. <https://www.vacareers.va.gov/why-choose-va/hiring-programs.asp> (accessed May 16, 2017).
- VA. 2017d. *Office of Academic Affiliations*. https://www.va.gov/OAA/gme_default.asp (accessed January 27, 2016).

- VA. 2017e. *Response to committee request for information*. Department of Veterans Affairs.
- VA. 2017f. *Rural veterans*. <https://www.ruralhealth.va.gov/aboutus/ruralvets.asp#vet> (accessed April 4, 2017).
- VA. 2017g. *State of the VA fact sheet*. Washington, DC: Department of Veterans Affairs.
- VA. 2017h. *Workforce detail data provided to the committee*. Department of Veterans Affairs.
- VA Office of Mental Health Operations. 2017. *OMHO staffing and vacancy survey: Analysis of results (MH position summary), reporting period: 6/1/2016–6/30/2016*. Department of Veterans Affairs.
- Watkins, K. E., H. A. Pincus, B. Smith, S. M. Paddock, J. Thomas E. Mannle, A. Woodroffe, J. Solomon, M. E. Sorbero, C. M. Farmer, K. A. Hepner, D. M. Adamson, L. Forrest, and C. Call. 2011. *Veterans Health Administration mental health program evaluation: Capstone report*. Santa Monica, CA: RAND Corporation.
- Weeks, W. B., L. E. Kazis, Y. Shen, Z. Cong, X. S. Ren, D. Miller, A. Lee, and J. B. Perlin. 2004. Differences in health-related quality of life in rural and urban veterans. *American Journal of Public Health* 94(10):1762–1767.
- West, A., and W. B. Weeks. 2006. Physical and mental health and access to care among nonmetropolitan Veterans Health Administration patients younger than 65 years. *Journal of Rural Health* 22(1):9–16.

Timely Access to Mental Health Care

Timely access to care is an essential aspect of health care quality. The Department of Veterans Affairs (VA) is working to overcome the significant and well-documented challenges it has faced in providing veterans with timely access. This chapter examines multiple dimensions of timely access to mental health care. It summarizes the published research regarding wait times, wait-time data collected within the VA, the qualitative site interview data obtained as part of this study, appointment scheduling practices, cancellation and missed appointment practices and policies, the VA's efforts to improve timely access, and suggestions for improvement from site visit interviews. The survey results from this study regarding timely access are noted in this chapter but reported in detail in Chapter 6 under the heading Barriers and Facilitators to Service Use.

There is no national consensus on what an acceptable length of time to wait for a medical appointment is, be it for a primary care, specialty care, or mental health care appointment (IOM, 2015). Nevertheless, many health networks have set their own standards for appointment wait times—which may be different for different appointment types—that their participating providers are required to follow (Medica, 2016; Partnership Health Plan of California, 2016; Peach State Health Plan, 2016; Superior Health Plan, 2016). At the VA, the need to improve wait times and scheduling has been an ongoing issue and has been the source of much controversy and critique. Technological improvements have been introduced to help solve problems related to timely access, but various implementation challenges have hampered success. In multiple reports since 2005 the VA Office of Inspector General and the Government Accountability Office (GAO) have both called for improved scheduling practices, decreased wait times, and improved wait-time data collection at the VA (GAO, 2012, 2015, 2016a; VA Office of Inspector General, 2005, 2007, 2012, 2016, 2017b).

The Institute of Medicine found that veterans face a variety of timely access to care issues when seeking mental health care for posttraumatic stress disorder (PTSD) (IOM, 2014). Problems related to access to care were found at many facilities, including wait times of weeks or months when seeking PTSD care, long wait times for evidence-based treatments for PTSD, evidence-based PTSD treatment not being offered at the required frequency, inadequate after hours and weekend appointments for PTSD treatment, and gaps

in tele-mental health capacity (mostly due to staff shortages) (IOM, 2014). Other studies have found that wait times can vary greatly across facilities (RAND, 2015a). Building on those findings, this section will highlight some of the ongoing issues with wait times and scheduling at the VA as reported in the literature. It will also summarize the findings from the committee's site visits that are related to wait times.

Although the research was not specific to veterans of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn, studies of wait times for veterans have found that long wait times can compromise health because of delayed use and can lead to poorer health outcomes and decreased user satisfaction (Pizer and Prentice, 2011; Prentice and Pizer, 2007). The poorer health outcomes, which were most evident among older veterans, included increased mortality. These studies did not, however, look at wait times and the use of mental health services specifically.

WAIT TIMES AND SCHEDULING CARE

The VA's mental health wait-time policy, outlined in *Uniform Mental Health Services in VA Medical Centers and Clinics* (VA, 2015b), requires that first-time patients requesting mental health care be seen for an initial evaluation within 24 hours, followed by a comprehensive diagnostic and treatment evaluation to be completed within 30 days. This policy reflects a revision made in November 2015, before which the comprehensive exam was required to be completed in 14 days instead of 30. The policy requires that ongoing appointments be scheduled within 30 days of the veteran's preferred date (this was unchanged by the November 2015 revision) (VA, 2015b).

Before the revision was made to the *Uniform Mental Health Services in VA Medical Centers and Clinics*, there was conflicting information regarding the time allowed to complete the comprehensive mental health exam. In 2014, in a response to the Choice Act, the VA stated that the policy required that comprehensive exams be completed within 30 days of the initial request (GAO, 2015; VA, 2014a), which contradicted the *Uniform Mental Health Services in VA Medical Centers and Clinics* at the time and up until it was updated in late 2015 (VA, 2015b). The GAO reported in 2015 that a number of VA officials, including leaders of VA medical centers (VAMCs) and veterans integrated service networks, did not know if they were supposed to meet the 14-day requirement as stipulated in the *Uniform Mental Health Services in VA Medical Centers and Clinics* or the 30-day policy for new patients requesting mental health care (GAO, 2015).

The VA publishes monthly wait-time data showing the average wait time from the veteran's preferred date for new mental health appointments for every facility across the system (VA, 2016a). Separately, it publishes data showing the percentage of new mental health appointments completed within 30 days of the patients' preferred date (VA, 2016a). However, using the veterans' preferred date as the benchmark, rather than the date of the initial request, does not align with the VA's own policy stipulated in *Uniform Mental Health Services in VA Medical Centers and Clinics*, which requires appointments for new patients to be completed within 30 days of the *initial request* for services. In multiple reports, the GAO has made it clear that using the preferred date rather than the date of the initial request does not fully capture the actual wait time for an appointment (GAO, 2012, 2015, 2016a).

In an attempt to improve transparency about wait times and the quality of care, in 2017 the VA launched www.accessstocare.va.gov. On that site users can search for facilities by location and see the average wait times for different types of clinical appointments (e.g., mental health, women's health) and visit type (e.g., returning appointment, new appointment). Satisfaction data by facility and appointment type are also available. The site's quality-of-care data are limited to comparing hospital-acquired infection rates among select VA medical centers and nearby private hospitals.

In an analysis of 2015 data, RAND (2015a) assessed wait times across VA facilities. For the analysis, benchmark wait times were defined as the average wait times among the top 10 percent of facilities for each appointment type. Facility-level wait times by appointment type were compared to this benchmark.

For mental health appointments the analysis found that more than half of VA facilities (77 of 141) were below (>0.5 to 2.0 standard deviations) or far below (>2.0 standard deviations) the benchmark. The remaining facilities (64 of 141) were near (within 0.5 standard deviations) benchmark wait times for mental health. As noted later in this chapter, and in the RAND analysis of these data, the GAO and the VA Office of Inspector General have questioned the reliability and accuracy of VA wait-time data (GAO, 2013, 2014, 2015, 2016a, 2017a; VA Office of Inspector General, 2005, 2007, 2017b), so it is possible that RAND's analysis used data that under-reported actual wait times (RAND, 2015a).

Same-Day Appointments

As part of the MyVA Mental Health Access Initiative, the VA has begun efforts to ensure that same-day mental health appointments are available throughout the system. From the start of fiscal year (FY) 2016 through June 2017, the VA completed over 1 million same-day appointments to over 500,000 unique veterans through primary care–mental health integration (PC-MHI) or regular mental health clinics. Currently, approximately 30 percent of the PC-MHI workload is devoted to same-day appointments: since the first quarter of FY 2016, PC-MHI has seen a 13 percent increase in the same-day workload, while general mental health clinics have seen a 20 percent increase. The ultimate goal of the MyVA Mental Health Access Initiative is to ensure that all facilities provide access to same-day services for urgent mental health appointments. Medical center directors have committed to making them available in all medical centers by the end of FY 2016 (VA, 2017b).

The VA has said that the greatest challenges associated with providing same-day access to mental health care appointments is balancing the supply of providers with the demand for same-day service. First, the VA must ensure there is sufficient staff to allot some providers to same-day appointments. However, assigning more staff than the demand requires means that staff time is wasted. Minimizing that waste and matching the supply of same-day service with the demand is a challenge that the VA has identified as one it faces (VA, 2017b).

Providers' Perspectives

The 21 sites visited as part of this study represented VA health care systems from across the country and from both urban and rural settings.¹ In most locations VA staff reported being able to get veterans into mental health appointments well within the required 30-day time frame. Several of their comments follow.

We have same-day access available across all sites of care. . . . To the time that they're sitting across from a physician or other medical provider to meet with them has been within 15 minutes. . . . Most of the time, it's within 5 minutes. [Seattle, Washington]

I think we're about 3 weeks to start individual therapy. We've been fortunate to keep it pretty close. That's something we're always watching and balancing, access to intakes and access to treatment. [San Diego, California]

The site visit teams also heard frustration from some providers about the inability to meet patient demand. As one VA clinician noted,

At the end of the day, there's never going to be enough of us. Then we have to start thinking about how we go on our own resources to spread ourselves as thick/thin as we can in order to do a credible job with the people who are in front of us. [Hampton, Virginia]

¹Due to the time constraints of these visits, no "highly rural" or "frontier" sites were selected as part of the study.

Veterans' Perspectives

In a study that looked at wait times and the perceived timeliness of care among VA users (of all eras) with mental health diagnoses ($N = 5,185$), Hepner et al. (2014) found that among patients who make routine appointments, nearly half reported being able to get appointments as soon as they wanted. Among patients who reported making urgent appointments, 42.8 percent reported getting them as soon as they wanted. The patient's specific mental health diagnosis did not significantly affect the perception of timeliness. These perceptions of timeliness estimates are slightly better than those reported by patients receiving mental health care with public or private insurance plans (Hepner et al., 2014), but still leave significant room for improvement.

On the committee's site visits, veterans often reported significant challenges with getting appointments in mental health care services:

After I got my service connection, it took me a year and 4 days to see my primary doctor, who was a nurse, so then they can refer you to mental health, unless it's an emergency. [Biloxi, Mississippi]

There was a 3-month wait to get my primary consultation. Again, it was, "This is the day and time that it's going to be. If you can't make, too bad." After that, I had to do another 3-month wait for my secondary consultation. After that, I got fed up with it. . . . It was absurd, so I'd stop using it. [Battle Creek, Michigan]

Veterans did not universally describe negative experiences. In each site, the committee members heard veterans describe quite disparate experiences getting into care, sometimes even when discussing the same facility in the health care network. The following two quotes, for example, are from Charleston, South Carolina:

I don't think my case was highly unique in that there was a seemingly strong emphasis on making sure I was put into the mental health services I needed right away.

I just for the first time went to the Charleston VA . . . which I had to wait 2 months for. . . . It's like a 3-hour drive from here, and I get there a half hour early to not be seen for my appointment, which was scheduled at 2 o'clock, until 4 o'clock. They said that it was because they were so busy.

Efforts to Improve Timely Access

The committee's findings also suggest that some of the access successes cited by the VA staff reflect some of the strategies intended to meet the 30-day benchmark for getting the veterans connected with the system, but not necessarily connected with care. For example, the site visitors were told by VA staff interviewees that in 2014 the VA nationwide implemented "orientation groups" for veterans who were newly coming in for mental health services. One clinical benefit of these groups is that veterans learn about the types of mental health services available at the VA so that they can make informed choices about their care when a clinical slot opens:

We really work to identify what they're ready for, so they're not waiting on a list . . . and say, "Oh, I can't do that. I'm not going to talk about . . . my trauma over and over and over again." . . . As soon as they pick what they want, then we send a confidential email out to those providers who provide that specific treatment. [Topeka, Kansas]

The systemic motivation for holding orientation groups is to reduce the wait times for veterans seeking VA care, and it appears to have worked. As a clinician at a community-based outpatient center (CBOC) in Tampa said, "We've cut down on our wait list tremendously. We're able to get

patients in within those 2 weeks, sometimes in the same week, sometimes even the same day, which is amazing.” A final reported goal of the policy is to “weed out” those veterans who are not yet ready to commit to treatment, as it is less disruptive to the system if a veteran drops out of an orientation group after 3 weeks than if he drops out after three meetings with a clinician whose appointments are at a premium.

While some veterans may have found this immediate connection useful, interviewees also expressed their discontent. A CBOC clinician conveyed what she had heard from her patients:

I’ve had guys say, “Are you billing my insurance company for that? Because I don’t want to pay for some group where I’m sitting in a meeting that I don’t need.” I’ve also had guys say, “I’m not taking a day off work to sit there and have somebody tell me about something. I said I want to see you. I don’t need all that stuff.” [Altoona, Pennsylvania]

The committee’s survey results (reported in detail in Chapter 6) support veterans’ perception of problems with timely access to care (see Table 6-17). Among VA users, fewer than half (40 percent) reported that obtaining mental health care through the VA was not very or not at all burdensome to obtain. About half (49 percent) of those who tried to get an appointment reported it was always or usually easy to get one. Only 17 percent indicated that they could always or usually get an appointment during evenings, weekends, or holidays. Sixty-five percent were very or somewhat satisfied with the time between requesting and receiving an appointment. However, the vast majority of veterans (80 percent) indicated that an easier appointment process was an important change the VA could make (see Chapter 6, Table 6-33). However, as discussed above, the committee did hear from veterans and providers who thought mental health services were reasonably available for veterans in their locations.

Scheduling Practices

Two recent GAO reports (GAO, 2015, 2016a) discussed the issue of scheduling practices in detail. Because the VA uses the veterans’ preferred appointment date—not the date of the initial request for services or referral to services—actual wait times are in most cases several days longer than what is reported. For example, when a veteran requests mental health services, the VA scheduler may take several days to contact the veteran to schedule the appointment. The time between the request and when the VA contacts the veteran to make an appointment is not captured in the wait-time data. Further, when the veteran is contacted, his or her preferred date may have already passed, which would also not be captured in the data. See Figure 9-1 below for an example that illustrates the discrepancy between actual wait times and the VA’s calculated wait time. GAO has included VA in its “High Risk List” in part because of these ambiguous scheduling policies (GAO, 2017a). GAO has assessed that the lack of clarity in the policy contributes to inconsistent and unreliable wait time data (GAO, 2017a). It calls for VA to issue guidance about the definitions used to calculate veterans’ appointment wait times and to communicate this within and outside the VA.

In 2013, the GAO reviewed VA primary care scheduling and wait times and found problems with the reliability of the recorded desired date (GAO, 2013). In 2014, the GAO reported that the VA was working to improve the scheduling systems but that continued work was necessary to ensure that scheduling problems were fully addressed in a timely fashion (GAO, 2014). However, similar wait-time and scheduling problems have been reported in GAO reports in 2015 and 2016 (GAO, 2015, 2016a) and in VA Office of Inspector General (OIG) reports from 2017, 2007, and 2005 (VA Office of Inspector General, 2005, 2007, 2017b). The VA OIG report from 2017 noted that the wait-time data the VA collects are often unreliable and found that wait times are often reported by the VA to be shorter than they

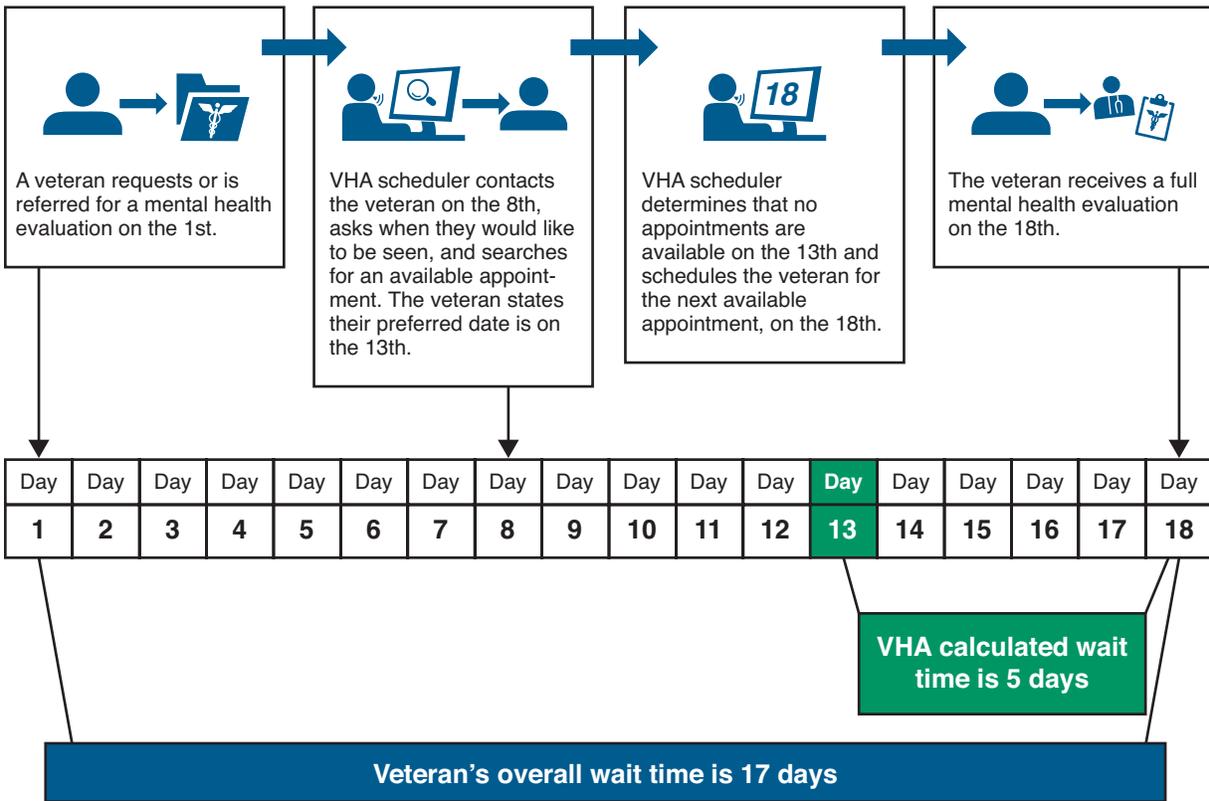


FIGURE 9-1 Actual versus VA calculated wait time for mental health appointments. SOURCE: GAO, 2015.

actually are because schedulers often do not consistently enter correct preferred appointment dates when scheduling new patient appointments. For example, VA OIG found that schedulers entered preferred appointment dates that resulted in inaccurate wait times for an estimated 59 percent of mental health appointments (VA Office of Inspector General, 2017b).

A major inefficiency in the scheduling system is that schedulers are unable to look for available openings *before* the veteran’s preferred date (GAO, 2015) even though there may be openings that would be satisfactory to the veteran. Furthermore, VistA inadequately tracks provider supply and demand and is not able to schedule resources beyond the local level. It also does not adequately integrate mobile, Web, and telehealth scheduling (MITRE Corporation, 2015).

The GAO has found other frequent administrative problems with the scheduling process for newly enrolled veterans (GAO, 2016a). For example, it found that newly enrolled veterans commonly did not appear on the new enrollee appointment request list, which schedulers use to contact veterans to schedule first appointments. If veterans do not appear on the list, they will not be contacted to make their first appointment. The GAO reported that the leadership in the VAMC where this was occurring was not aware of the problem and did not know why it was happening. The report also found that schedulers frequently did not contact veterans at all to schedule appointments. In some cases they did contact them but not at the frequency required by VA policy. The GAO concluded that these administrative scheduling weaknesses may have led to unnecessary delays in care for veterans (GAO, 2016a).

In a series of reports the VA OIG concluded that improper scheduling practices in many cases may be due to inadequate training or a lack of knowledge of the required policies (VA Office of Inspector General, 2016). One practice that the VA OIG found, for example, was that some schedulers would “negotiate” a veteran’s preferred appointment date by suggesting a date on which a provider was available rather than wait for the veteran to state his or her desired date. VA OIG reports have also found some instances of intentional manipulation of wait-time data to falsely demonstrate that wait-time benchmarks are being met (VA Office of Inspector General, 2016).

The committee’s survey revealed that a large proportion of veterans are not satisfied with the mental health appointment-making process at the VA. Among veterans who screen positive for a mental health need, 54 percent of veterans who responded to the question indicated that the process of getting mental health care at the VA was very or somewhat burdensome. Among the same population of veterans, 43 percent indicated it was never or sometimes easy to get an appointment. Likewise, 34 percent of veterans with a mental health need who use VA services indicated they are very or somewhat dissatisfied with the time between their appointment request and the actual appointment. For more details on these findings, see Chapter 6, Table 6-17.

The VA’s Veterans Satisfaction Survey (VSS), an annual survey of veterans served by the VA, also asks veterans about mental health care appointments. For example, using a scale of 1 to 5, where 1 is strongly disagree, 5 is strongly agree, and 3 is neither, veterans were asked to rate the statements, “I can get appointments with my mental health provider on the day that I want or within two weeks of the day I want,” and “My mental health provider and I agree on how often I should have appointments.” For FY 2016,² the VA reported a mean rating of 3.84 (standard deviation [SD] = 1.25) and 3.99 (SD = 1.02) (VA, 2016e), respectively, for OEF and OIF respondents, which possibly suggests some agreement with these statements. (See Chapter 15 for details about the VSS.)

On the committee’s site visits, veterans frequently expressed high levels of frustration with the VA scheduling system, with comments that reflect some of the complexities described above. Specifically, many veterans were unhappy that they could not choose appointment times that work for them.

You get [your appointment] in the mail and you have to go to the appointment. . . . The VA is like, “Oh, we’ll see you in 3 months. Here’s the date and time and you have to be there.” [Cleveland, Ohio]

VA clinicians also remarked on veterans’ frustrations and their own frustrations with the scheduling system. One reported,

They decide when your appointments are. . . . You get this letter in the mail, and either you make it or you cancel it. . . . After two missed appointments, they drop you from mental health. [Temple, Texas]

Cancellations and Missed Appointments

Cancellations by the VA (not the veteran) were a problem reported by numerous veterans on the committee site visits. This was exacerbated in those situations when veterans took time off of work or lined up a babysitter, traveled to the VA facility, sat for hours in the waiting room, only to find out that the appointment had been canceled. One veteran from Cleveland, Ohio, noted, “My second appointment, the doctor canceled, didn’t tell me. I showed up and I sat there for an hour and a half. The third appointment, the doctor canceled, nobody told me. I sat there for 45 minutes, and went and made a complaint.” This frustration with cancellations was enough for some veterans to discontinue treatment at the VA:

²The FY 2016 report reviewed by the committee covers survey data collected through June 2016.

Then someone called and canceled my appointments. Then they rescheduled me without receiving any notice. . . . Then later, “OK, you didn’t show up.” I’ve written off the services here. [Charleston, South Carolina]

Adding further frustration for veterans is the fact that although they will sit in the waiting room for hours waiting for an appointment, the VA may cancel an appointment if the veteran is 10 minutes late. For example, a veteran reported,

I pulled in . . . 45 minutes before my appointment. But by the time I got in there, I was late. . . . My appointment was canceled. It’s just a nuthouse over there sometimes to park your car. [East Orange, New Jersey]

The issue of missed mental health appointments or “no shows” is complex, with differing interpretations of how they occur. From many staff members’ perspectives, veterans’ failure to show up for appointments not only shows a lack of personal responsibility, but contributes to access challenges for other veterans:

Veterans are only going to get better if they take a little bit of ownership for identifying their needs, driving to the VA and getting their ID card, calling the 800 number and making an appointment, canceling their appointment if they can’t go so it doesn’t jam the system for everyone else to try to get an appointment. [Tampa, Florida]

In fact, the site visitors did hear from veterans who admitted they simply had not gone to their appointments:

I have a severe memory issue. . . . I’ve missed a handful of appointments because I didn’t write it down. [Cleveland, Ohio]

But many veterans presented a more complex picture of “no shows” than did the staff. For example, across all 21 site visits, veterans who tried to be responsible reported significant difficulty contacting their providers if they needed to miss or change an appointment:

There’s one number for the VA. You call that number, and you talk with someone, explain to them what your situation is, and then you are transferred. . . . You’re not even told, “I’m transferring you.” You’re just cut off. [Cleveland, Ohio]

I remember calling [my therapist], saying, “I’m trying to call but nobody’s answering.” There’s no voicemail. . . . I called for like a week straight. When I did finally get to somebody, they kept sending me to the wrong departments. It was a mess, so I gave up. [Hampton, Virginia]

The VA has acknowledged the difficulties with the phone system and in 2016 began the VA Medical Center Call Center Expansion (VCCE) project, designed to improve veterans’ access to care through the telephone. Under the program, VAMCs that lack dedicated call centers supporting primary care appointment scheduling, nurse triage, and pharmacy telephone operators were required to establish one no later than December 31, 2016. Since then, the VA has initiated a number of telephone urgent care call center activities to further improve the telephone experience (VA, 2017a).

While the committee completed the site visits before the VCCE was complete, VA staff were often able to corroborate the phone system challenges, noting, for example, that calls to CBOCs often get routed back to the operator at the VAMC.³ Staff members also described days in clinics that are so

³Site visit team members often reported similar experiences when calling CBOCs.

hectic that front desk clerks are not able to answer the phone or are too busy to pick up the voicemails. A clinician at a CBOC described what she experienced with one of her patients:

I was present when he [veteran] called to cancel. [Then] I happened to be in his chart for something and it said “no-show,” and so I actually called the clinic . . . and they changed it to “Canceled by patient.” I haven’t had those situations often. [Battle Creek, Michigan]

As was suggested above in the discussion about appointment cancellations, some theorize that coding a VA-canceled appointment as a “no show” by the veteran not only puts the onus for the missed appointment on the patient, but also theoretically resets the clock on the 30-day window. While the exact causes of the “no show” problem are not clear, there is general agreement that the VA could accommodate more veterans—and accommodate them more quickly—if the problem of unfilled appointments could be resolved.

At numerous sites, veterans described appointment cancellations by the VA that appeared to be happening so frequently as to be systemic. The following quotes are illustrative:

I was standing in front of him [receptionist], and he insisted. He told me three times it was canceled by patient. I was getting worked up, so he dug into the computer a little more and saw it was canceled by therapist. [El Paso, Texas]

They’ll call you sometimes and be like, “Oh, your appointment was canceled.” Then next appointment is another 3 months from that date. Then it’s 6 months before you’re seen. [Hampton, Virginia]

One vet center staff member—also a veteran—described her most recent experience with appointment cancellations and offered her own explanation for the pattern:

February 2nd I had a specialty care clinic for my service-connected disability canceled. Rescheduled February 25th. The day of, canceled. Rescheduled March 6th. Canceled. Rescheduled. If you cancel me, if we’re 30 days out, *the clock restarts*, and it’s not picked up on the system list [*emphasis added* – El Paso, Texas].

Shorter Appointments, Longer Intervals Between Them

Another strategy to meet the demand and shorten wait times is to shorten the actual appointment time. Many veterans are aware that systemic strains are the reason for the brevity of appointments, and they frequently described appointments with clinicians that felt too brief to be of any value, either to the clinician (who might want a little more information) or to the veteran (who might want to share a little more). The following quote is illustrative and reveals that veterans are aware that systemic strains are the reason for the brevity:

I felt like I was being rushed, because there were a lot of people there. . . . It’s like they have a quota, and they have to receive certain people at certain times. . . . She didn’t say she would talk to me about it, because obviously she’s not going to be my psychiatrist. She said, “Somebody will do something about it, later on.” . . . I haven’t been back since. [Charleston, South Carolina]

While shortening appointments may get more people seen on a given day, many providers reported that the intervals *between* appointments are longer than they would clinically recommend. The following quotes illustrate VA staff members’ concerns about this.

Their appointments are too far spread, especially for mental health. . . . They said, “We don’t have that capacity to do weekly appointments. We can see you once every 3 weeks.” [Temple, Texas]

I think it's hard for me to feel like I'm providing good patient care when I can only see someone once a month for therapy. [Topeka, Kansas]

While shorter appointments and longer intervals between them may make it possible to get more veterans seen at a facility, many clinicians whom the committee heard from raised questions about the clinical ramifications of the strategy.

Extended Hours

Many veterans noted that the VA service hours (typically 8:30 a.m. to 4 p.m.) are the same as their work and school hours, making it difficult to schedule appointments that don't conflict with other commitments. One veteran in Altoona, Pennsylvania, said, "If you're at work, we're at work, too. When you're off work, that's when we're off." Although many VA facilities have recently worked to expand hours, these expanded hours are not without significant challenges.

Some VA locations offer extended hours and weekend appointments, which has been met with mixed success. Staff reported that extending the hours and offering a "drop-in" approach has not been particularly successful. The following comment from a provider at a CBOC is illustrative of this experience:

Our substance abuse groups on Tuesday evenings and Saturdays have not gone over well, . . . The groups during the day will have 15 veterans, sometimes up to 20 even, and maybe 2 or 3 on a Saturday was a good group. [Iowa City, Iowa]

Interestingly, several veterans interviewed during the site visits said that they preferred getting counseling services at the vet centers because the centers regularly offer evening and weekend hours during which time they can receive individual counseling or attend a group session. And a provider in Biloxi who said her extended hour appointments were full, offered this suggestion:

. . . if you're doing your own scheduling, . . . if you're making a clinical decision about who you offer those slots to, . . . that makes a big difference. [Biloxi, Mississippi]

Another success story involved an evening skills and education group for spouses:

The course we're mainly teaching now, it's NAMI Homefront, . . . which is a 6-week family psycho[logical] ed[ucation] course. . . . We do all sorts of marketing. Not just Facebook. We do newspaper. We do TV. We'll do radio. The grant money and the support of our leadership here [allow us] to get food, so we serve a dinner. They're here . . . because they're so desperate for information. We engage them. [Syracuse, New York]

When asked why she thought this approach had been successful, the staff member identified the strong marketing effort and the fact that participants are provided with a meal. And yet a colleague of this interviewee, during the same group discussion, reported having tried to offer a substance use disorder treatment group in the evenings—complete with dinner—with no success at all. Despite the tendency for appointments during extended hours to go unused, VA staff continued to discuss ways to improve service access for veterans with busy lives.

PROGRAMS TO IMPROVE TIMELY ACCESS TO CARE

The VHA has employed a number of strategies and programs designed to help make care more accessible to veterans both within the VA and in the broader community, using non-VA providers. This section describes some of these strategies and programs.

Improving the VistA Scheduling System

VistA, the VA's information technology platform implemented in the early 1980s, includes applications for clinical, financial, administrative, and infrastructure needs in a single database that is used throughout the VA system. However, as discussed earlier in this chapter, inefficiencies in the VistA scheduling system are contributing to longer-than-necessary wait times. The congressionally appointed Commission on Care recently called the VistA system “antiquated, highly inefficient” and said it “does not optimally support processes or allow for efficient scheduling of appointments” (Commission on Care, 2016). It is also very expensive to maintain—85 percent of the VA's total information technology budget is devoted to systems operations and maintenance (Commission on Care, 2016). Most VAMCs have customized their local versions of VistA—there are approximately 130 versions across the system—which further complicates maintaining and operating the system (Commission on Care, 2016). In 2015, the VA rolled out VistA Scheduling Enhancements (VSE), which introduced a graphical interface designed to increase scheduler efficiency, improve usability, and decrease the amount of time it takes to schedule an appointment (VA, 2016d). The improvements allow schedulers to view all the providers' scheduling grids to better use scheduling opportunities (VA, 2017b). Additional enhancements to the VistA graphical interface, including integration with the Veteran Appointment Request mobile application (discussed below), are also planned.

Despite these improvements, VistA remains an exceedingly complex system. The VSE user guide is nearly 200 pages in length (VA, 2016d), and the enhancements fail to address the system's inability to capture accurate clinical use data, leaving administrators, managers, and planners without the information they need to effectively manage the supply of clinical slots (Commission on Care, 2016).

In another attempt to improve the scheduling process, the VA rolled out a mobile application called Veteran Appointment Request (VAR) which allows veterans to schedule appointments from their smartphones, tablets, or through the Web on a home computer. The app allows users who are receiving care from either a VAMC or CBOC to schedule and request primary care appointments and request mental health appointments (VA, 2016b). VAR and other mobile technologies are described in greater detail in Chapter 14.

VistA Scheduling Enhancements and VAR were initially designed to be short-term solutions. As a long-term approach, the VA awarded a \$624 million contract to Epic Systems and Lockheed Martin in August 2015 to supply and implement a commercially available medical appointment scheduling system to integrate within VistA scheduling. The system includes Epic Cadence (a medical scheduling product) and My Chart (a patient portal for self-scheduling). This system is currently in the pilot phase, and the VA plans to implement it in one location in 2018. An evaluation of that localized implementation will help determine plans for national deployment.⁴

⁴Personal communication with Stacy Gavin, VA Office of Mental Health and Suicide Prevention, 2017.

Timely Access to the Veterans Crisis Line

The Veterans Crisis Line (VCL) is a confidential service to help veterans and active-duty service members (and their friends and family) work through a suicidal or self-harm crisis. VCL was launched in 2007 and since then has answered over 2.9 million calls from veterans, service members, and their friends and family members (VA, 2017b). The VCL is accessible via a toll-free number (launched in 2007), text message (launched in 2011), or over the Web via online chat (launched in 2009) (VA, 2016c). The chat service has answered over 350,000 requests; the text messaging service has answered nearly 73,000. VCL staff has sent nearly 474,000 referrals to local VA suicide prevention coordinators on behalf of veterans (VA, 2017b).

VA has campaigned extensively to raise awareness about the VCL. Karras et al. (2016) reported on patterns of VCL use associated with a VA VCL awareness campaign that ran for 7 months in 2009. The campaign was associated with a small (but significant) increase in daily calls to the VCL, demonstrating that the VA's awareness campaign was effective at increasing traffic to the VCL, potentially preventing suicides that otherwise may have occurred.

There is some evidence, however, that VCL has had problems providing timely access to its service. In 2015 the GAO reviewed how well the VA was meeting its response-time goals for the VCL, how the VA was monitoring VCL call center operations, and how the VA was working with VCL service partners to ensure that veterans received high-quality service (GAO, 2016b). Perhaps the most worrisome finding concerned the reliability of the text messaging system. To test the system, the GAO sent 14 text messages to the VCL; four of the messages went unanswered. The VA informed the GAO that it did not monitor the text messaging system itself. Rather, the VA was relying on its third-party text messaging provider for all aspects of the text messaging system, including testing, and was not aware of any problems. The provider informed the GAO that it has no routine testing system in place. Similarly, the VA reported to the GAO that there were no standard benchmarks for response time for either text messages or online chats. The GAO recommended that the VA set performance indicators for these modalities and routinely test the text messaging system.

The GAO also tested wait times for accessing the VCL via telephone and found some problems. The test found that 73 percent of calls were answered within 30 seconds and 99 percent of calls were answered within 120 seconds, results that were similar to the VA-reported data from 2015 but that fell short of the VA's goal of answering 90 percent of calls within 30 seconds. Calls not answered within 30 seconds were routed to a backup call center although responders there did not have access to veterans' electronic medical records of those enrolled in VA care, did not have the same training as the primary VCL providers, and had no way to send caller data to the main VCL center (making follow-up impossible). To help improve caller wait times, the VA established a center evaluation team to monitor performance of the VCL and to make changes if necessary. Other recent improvements include data-driven scheduling to match demand, the employment of more responders, and the adoption of new procedures to quickly reroute callers who are not in crisis. Updates to the telecommunications infrastructure were also under way in 2016. VA officials also told the GAO that by summer 2016 supervisors would have access to real-time performance data to track the workload and performance of responders (GAO, 2016b).

Despite these efforts, there were allegations in 2016 that the VCL management was still facing problems as the call response times had gotten worse, not better (Kime, 2016a). Reports indicated that up to half of calls in May 2016 were not answered within 30 seconds and were rerouted to the backup call center—where providers did not have access to patient records, had received less training than providers in the main call center, and had no way to share caller data with the VCL providers for follow-up. Calls were being rerouted because some VCL providers were leaving their shifts early, refusing to go to the building they were assigned to, and answering as few as one to five calls a day.

Recent efforts to improve the VCL include a hiring surge and expansion to a second VCL site in October 2016 in order to double capacity as well as the implementation of a workforce-management system and of a quality management program (VA, 2017b). In April 2017 VA Secretary David Shulkin announced in a press release that less than 1 percent of calls to the VCL were being rerouted to backup centers (VA, 2017d). While lawmakers commended this improvement, they also cautioned that other improvements were still needed, such as filling the director's position at the Veterans Crisis Line (Ogrysko, 2017). Similarly, the GAO (2017b) and the VA Office of Inspector General (2017a) have both recently identified continuing problems related to wait times, leadership, and performance monitoring and highlighted past recommendations that still have not been addressed.

Community Care

The VA has a long history of contracting with non-VA providers to serve veterans that need care that the VA is unable provide due to limited resources, unacceptable wait times, or geography. These programs, which have evolved and grown in recent years, are overseen by the VA Office of Community Care. In FY 2016, community care accounted for about 16 percent of VA's medical care obligations.⁵ Recent legislative action—most notably the Veterans Access, Choice, and Accountability Act⁶—has allowed the VA to greatly expand the use of community care to improve access to services—including mental health services—for veterans. In 2014, 20 percent of all VA users utilized some community care. Community care for mental health, however, has been less utilized. In 2014, only 2.3 percent of veterans' mental health visits involved non-VA providers (RAND, 2015a). VA community care programs include Traditional Community Care, Patient-Centered Community Care (PC3), and the Veterans Choice Program (VCP). However, recent legislation (Surface Transportation and Veterans Health Care Choice Improvement Act of 2015)⁷ has directed the VA to consolidate all community care programs under the VCP umbrella, and the VA has submitted a draft plan to do so. As of July 2016, nearly all community care was provided under the VCP (GAO, 2016c). This section will discuss community care provided through PC3 and VCP, the administration of the programs, and the questions that remain about VA oversight and quality monitoring of the care provided via community care.

Patient-Centered Community Care (PC3)

While it will ultimately be combined with the VCP, PC3 is a national VA program to provide eligible veterans access to certain medical care (including primary care) when the veteran's local VA facility cannot provide the needed service due to long wait times, lack of a needed specialist, or long travel distance. For a veteran to receive purchased care through the PC3 program, the veteran's provider must first determine that the needed care is not available at the local VAMC. The Non-VA Medical Care Office then must authorize the veteran to obtain care through PC3. The veteran should then be contacted by the regional third-party contractor (Health Net Federal or TriWest Health Care Alliance) within 5 days to set up the appointment with the PC3 provider. After the appointment is made, the VA sends the veteran's medical information to the PC3 provider. Following the appointment, the PC3 provider must return the veteran's health record to the VA within 14 days (outpatient) or 30 days (inpatient) (VA, 2015a).

⁵Personal communication with Stacy Gavin, VA Office of Mental Health and Suicide Prevention, 2017.

⁶Public Law 113-146.

⁷Public Law 114-41.

Two 2015 reports by the VA Office of Inspector General looked at the implementation of PC3 (VA Office of Inspector General, 2015a,b). Neither report was specific to mental health services, but both looked at overall systemic issues in the program. One report noted that utilization of PC3 in 2014 fell short of expectations. The VA had projected PC3 to provide up to 25 to 50 percent of all non-VA care; however, it ultimately only provided 9 percent. VA OIG attributed the less-than-expected utilization to the PC3 administrators failing to establish adequate provider networks (VA Office of Inspector General, 2015a). The other investigation found that VA staff took an average of 19 days to submit authorizations to the PC3 contractors and a high proportion of authorizations were then returned to the VHA for being incomplete, further delaying care (VA Office of Inspector General, 2015b). In both reports VA OIG asserts that the VHA does not have effective systems in place to oversee the implementation and surveillance of the program (VA Office of Inspector General, 2015a,b). As noted above, however, community care programs are being consolidated under the VCP and most veterans in need of community care are now referred to the VCP if they are eligible for it, rather than PC3. For example, in FY 2016, there were only 511 mental health authorizations for PC3, compared to 47,109 for VCP.⁸

The Veterans Choice Program

In response to the health care access issues facing the VA, including excessive wait times for appointments, Congress passed the Veterans Access, Choice, and Accountability Act of 2014⁹ (“Choice Act”).¹⁰ The Choice Act provided new authorities, funding, and other tools to help improve access to care for veterans using the VA system, and it expanded the services provided under PC3. A crucial part of the Choice Act is the Veterans Choice Program, which allows veterans to seek care outside the VA system from an eligible provider if they meet one of several criteria, including that the veteran cannot schedule an appointment within 30 days of their clinically necessary date or that the driving distance from the veteran’s home to the nearest VA facility with a full-time primary care physician is more than 40 miles. If a veteran needs a service that is offered at a VA facility that is more than 40 miles away from the veteran’s home, but there is a VA facility within 40 miles with a primary care physician but does not provide the needed service, the veteran is not eligible to use the Choice Program as the law is currently written (despite the needed service being more than 40 miles away). The VA has stated that a statutory change is required to change the eligibility requirement regarding distance to needed service (rather than nearest facility) (VA, 2015c).

The GAO reported in 2017 that through FY 2016, 55 percent of veterans who used the VCP did so because the service they needed was unavailable at a VA medical facility; 35 percent of those who used the program did so because of a greater than 30-day wait time for an appointment at a VA facility; and 10 percent of veterans who used the program did so because they lived more than 40 miles away from a VA facility or faced another travel burden (GAO, 2017c).

In 2017, the Veterans Choice Program Extension and Improvement Act was signed into law¹¹; it allows the VCP to continue until the \$10 billion allocated for the program is depleted. The bill also streamlines the payment process. An additional \$2.1 billion was authorized for the VCP with the signing of the VA Choice and Quality Employment Act of 2017.¹²

⁸Personal communication with Stacy Gavin, VA Office of Mental Health and Suicide Prevention, 2017.

⁹Public Law 113-146.

¹⁰The Veterans Access, Choice, and Accountability Act of 2014 was further amended by the Department of Veterans Affairs Expiring Authorities Act of 2014 (Public Law 113-175).

¹¹Public Law 115-26.

¹²Public Law 115-46.

In 2017, the VA reported that there were 500,000 community providers eligible to provide care under the VCP or PC3 (VA, 2017c). In FY 2016, 22,077 mental health providers were in the VCP and PC3 provider network. Under a VCP agreement, providers must accept Medicare rates for reimbursement (VA, 2014b). Providers must maintain the same or similar credentials as VA providers and must submit claims to the VA for reimbursement. As the law was originally written, providers were required to submit patient records with their claims (within 14 days for outpatient, 30 days for inpatient, and 24 hours for critical care) so the VA could incorporate them into the veteran's electronic medical record (VA, 2014c). To speed up the reimbursement process, the VA abandoned this requirement in 2016 (Kime, 2016b). However, slow processing is still an issue as the VA reported in 2017 in that it takes more than 30 days to process 20 percent of "clean" claims (VA, 2017c).

As the VCP has evolved since its inception, a number of legislative and policy changes have been implemented to improve access to care. Patient and provider eligibility requirements have been eased, increasing the pool of both patients and providers eligible to participate. Additionally, third-party administrators are now embedded in some VA facilities to help make veteran participation more seamless. Provider authorization requirements have also been eased (McIntyre, 2016). Originally, providers had to request an authorization (for both PC3 and VCP) before every episode of care. Authorizations now last for up to 1 year from the date of the first appointment. The VA has issued over 3 million authorizations, over 8.7 million appointments have been completed, and it has served over 1.6 million unique veterans under VCP (VA, 2017e). In FY 2016, the VA issued 47,109 authorizations for mental health under VCP to 33,199 unique veterans. This is a dramatic increase from FY 2015, during which the VA issued 7,597 authorizations for mental health to 6,307 unique veterans.¹³

Other elements of the Choice Act designed to improve access to care for veterans include an extension of Project Access Received Closer to Home and the Assisted Living Pilot Program, an expansion of mobile vet centers and mobile medical centers, and outreach to the Indian Health Service. All of these efforts were designed to improve access to populations with limited access to VA services, such as rural populations, veterans with traumatic brain injury, or Native American veterans (VA, 2014c).

The Choice Act also mandates new third-party assessments of VA services, the creation of a "technology task force" to review VA patient scheduling processes, the lease of new medical facilities, the creation of new facility-specific wait-time data (which will be publicly available), new staffing requirements, and expanded military sexual trauma counseling and care (VA, 2014c).

While VCP is intended to expand access to veterans, there is some concern that many community mental health providers may not be equipped to serve the unique needs of veterans, particularly those with service-connected needs (Martsof et al., 2016). In a survey of non-VA providers, RAND found that only 13 percent of respondents were "ready" to deliver culturally competent, high-quality mental health care to veterans and their families (Tanielian et al., 2014). Respondents completed a series of questions related to cultural competency, training for and use of evidence-based practices, practice settings and proximity to military and VA facilities, and prior experience in VA or military settings. Only 23 percent of those practicing within 10 miles and only 15 percent of those practicing more than 10 miles from a military facility demonstrated high military cultural competency. Only 35 percent of psychotherapists reported that they were trained and had received supervision in the delivery of at least one evidence-based practice for both PTSD and depression. Licensed counselors were best equipped to deliver evidence-based practices for PTSD and depression, but still less than half of the respondents met the RAND criteria.

¹³Personal communication with Stacy Gavin, VA Office of Mental Health and Suicide Prevention, 2017.

While questions about the quality of community providers are legitimate concerns, the committee's survey results showed that users of non-VA mental health services and users of VA mental health services both positively rated their experiences with providers. While the responses among the two user groups were similar, non-VA mental health users rated their experiences slightly higher across the four domains included in the survey. For example, 76 percent of non-VA mental health users strongly or somewhat agreed that their mental health provider understood their background and values. Among VA users, 69 percent somewhat or strongly agreed with that statement. Among non-VA mental health users, 89 percent reported they never had a hard time communicating with their provider; among VA mental health users, 75 percent reported they never did. Other domains, such as "I feel welcome at my mental health provider's office" and "my mental health provider looks down on me and the way I live my life" were similar among VA mental health users and non-VA users, but non-VA users did rate their experiences slightly more favorably than VA users did. It should be noted though that the non-VA providers the respondents are referring to in survey are not necessarily VCP providers (although it is possible that some of them are).

Another report by RAND found that about half of those who live more than 40 miles away from the nearest VA facility also live more than 40 miles from the nearest non-VA mental health care provider (RAND, 2015a). This illustrates the overall shortage of mental health providers in the U.S. health care system, particularly in rural areas (see Chapter 8 for an expanded discussion on this topic). It also indicates that because of the overall mental health care provider shortage and the uneven distribution of providers, the VCP may not improve access to mental health care for many veterans living more than 40 miles from a VA facility.

The GAO looked at the scheduling process and timeliness of routine and urgent care provided under the VCP (GAO, 2017c) and found that if the maximum allowable time to schedule appointments is used throughout the process, a veteran can wait for up to 81 days to receive care through the VCP. However, the VA cannot calculate actual wait times that veterans have experienced under VCP, because it does not collect all the data it needs to do so. The data the VA does collect begin at the moment a veteran schedules an appointment with the third-party administrator, but the data do not capture the time it takes a VAMC to send third-party administrators the referral or the time that passes while the third-party administrator attempts to contact the referred veteran. The GAO reviewed 55 routine care authorizations and found VAMCs took an average of 24 days to send the VCP referral to the third-party administrator, who in turn took an average of 14 days to accept the referral and confirm with the veteran they wanted to opt in to the program. After appointments were scheduled, an average of 26 days elapsed before the actual appointment occurred. VA wait-time data only include the time between the appointment scheduling and the actual appointment. The GAO did a similar analysis of a sample of urgent care authorizations and found similar wait times at each of the stages of the process. In 2015, RAND highlighted many of these same data insufficiencies and recommended that the VA improve data collection related to community care to improve processes and outcomes for veterans (RAND, 2015b).

As the use of VCP expands, the VA faces several challenges to ensure that community care best serves the veterans that utilize it. For example, coordinating and managing the care veterans receive via community care providers poses a challenge, especially since the requirement for providers to submit patient records with their claims was abandoned in 2016 (Kime, 2016b). While the program is being phased out, PC3 in particular has been criticized for lacking the necessary measures to appropriately coordinate veterans' care (RAND, 2015b). One barrier to effective coordination of care is the inability to seamlessly pass patient records electronically from the VA to community providers and back. Few community providers meet the technical requirements needed to meet federal standards for secure exchange of health information (RAND, 2015b). RAND reported in 2015 that electronic record sharing

with non-VA providers was a rare occurrence: nearly half (47 percent) of facilities reported they share records electronically with non-VA providers “none of the time” and 39 percent said they do it “some of the time” (RAND, 2015b).

Site Visit Findings Regarding the Choice Program

Despite numerous veterans’ reports of not being able to get into care in a timely fashion, VA staff generally indicated that they are not referring veterans via the VCP. While the site visits were completed during the first year of the VCP, providers offered several explanations for this, one of which was the belief that non-veteran providers will not be able to offer services that are appropriate for the veteran population, as was described in Chapter 8 in the discussion about quality of care. But even providers who are willing to refer veterans to the community reported not using VCP because of its unwieldiness:

I’ve heard a lot of complaints about the Veteran’s Choice program. . . . they’re told on the other end, “Oh, you don’t qualify because you live too close,” or, “You have a VA facility somewhere else that can do this.” [Battle Creek, Michigan]

[F]ee-basis has now gone away, and the Choice Program exists, which is actually not been beneficial . . . because there are so few Choice providers. . . . It’s been a very difficult process for us to digest, knowing that we’ve got to figure out a way to get these patients care. [Denver, Colorado]

[It] is almost impossible to get referrals to anybody through that [Choice]. I got a veteran this morning that wants to do hypnotherapy. I called Choice, and I said, “I’m a provider. I’m looking to see if I can find a provider in the community that will do hypnotherapy.” He said, “Wait a minute. I can help you with that.” He gets back on the phone, and then he says, “No. You have to call your local VA to get a provider list of those resources.” I *am* the local VA! [Seattle, Washington]

Instead of using Choice, providers who refer veterans to the non-veteran sector reported taking advantage of a variety of resources to support their clients’ needs. In most locations, VA staff reported making referrals to their local vet centers. As noted earlier, the vet centers are funded by the VA, but they operate separately from the VAMCs and CBOCs. Consistent with that separation, in a few locations VAMC staff indicated little to no awareness of the availability of vet center resources. Veterans, too, reported looking for assistance at vet centers.

Third-Party Administrators

Since 2013, VA community care programs have been managed by two third-party administrators—TriWest and Health Net. The two entities are responsible for developing regional networks of providers, verifying that providers are appropriately credentialed, licensed to practice in their states, and eligible to participate in federally funded health care programs. They are also responsible for entering into agreements with providers and processing payments to providers for their services, and scheduling appointments with veterans (after receiving referrals from the VA). It should be noted that under certain circumstances,¹⁴ the VA can enter into direct agreements (“VHA Choice provider agreements”) with VCP providers, bypassing the third-party administrators.

¹⁴VHA Choice provider agreements are permitted under several circumstances. For example, when no network provider is available for the requested service; when the veteran requests a provider that is not in the contractor’s network; when the contractor was unable to contact the veteran; and when the contractor could not schedule the needed service within the required time frame.

A recent GAO report (GAO, 2016c) examined the credentialing procedures for both TriWest and Health Net and the VA's oversight of the contractors. In an effort to quickly build a network of eligible providers, the VA deliberately made the credentialing process far less rigorous for VCP than it is for PC3. The credentialing process for VCP typically takes 5 to 10 days, versus 90 days for PC3. To participate in VCP, third-party administrators must verify that providers hold an active, unrestricted license in the state where the VCP service will be performed; have a national provider identification number; have a Drug Enforcement Agency number to prescribe controlled substances; are not excluded from participating in federally funded health care programs; and participate in Medicare. Providers must verify these credentials annually. In addition to the VCP requirements, PC3 providers must also hold board certification (for certain specialties) and verify their education and training, employment history, malpractice history, and malpractice insurance. The VA's draft plan to consolidate all community care programs under the VCP specified that once the consolidation occurs, the contractors' credentialing processes will be accredited by a national organization and follow accreditation standards (GAO, 2016c).

The GAO's review of contractors' accreditation processes found that both TriWest and Health Net complied with accreditation procedures for PC3. The procedures were well documented in written policies and included quality assurance mechanisms to monitor and spot-check procedures. On the other hand, for VCP, the GAO found that contractors did not always verify credentials and in some cases could not produce documentation that demonstrated that verification occurred. The review also found that the VA lacked a comprehensive system to oversee verification compliance among both contractors. The GAO found that the VA's monitoring is generally limited to independent reviews of physician's credentials, but does not include oversight of the contractors' processes (GAO, 2016c).

As part of the 2015 independent of VA health care delivery, RAND examined community care, including third-party administrators, in depth (RAND, 2015b). While the assessment took place at a time of transition in the community care environment (the VCP was just beginning), RAND made a number of recommendations for the VA to consider to improve community care. Among them, it recommended that the VA evaluate the performance of the third-party administrators, as well as the adequacy of the provider networks, the claims processes, and veterans' experiences with the contractors and the services they receive through them. It also recommends that contracts with third-party administrators (and providers) should include requirements for data sharing, quality-of-care reporting, and care coordination between providers, third-party administrators, and the VA.

PRACTICES TO FACILITATE TIMELY ACCESS

In addition to the programs discussed above, the site visit interviews revealed several ways veterans can obtain easier and more timely access to services. Veterans who have received either formal or informal assistance navigating the VA system report that they are able to receive care with relative ease. Furthermore, veterans who present with acute mental health needs are also, understandably, given priority.

Navigators and Case Managers Facilitate Timely Access

Veterans and VA staff alike described the challenges working through a massive organization like the VA, which can frustrate even the most seasoned case manager, let alone a veteran with cognitive challenges from PTSD or traumatic brain injury. Veterans described their frustrations in having to fill out forms multiple times because the originals had gotten lost, "being treated like a number," and waiting for "someone" at the VA to call them for an appointment. Said one veteran in El Paso, Texas, "Make [the VA] easier to get through, and make it easier to navigate. Less bureaucracy, that would do it, less

bureaucracy. . . . At least give us a map or something. That would be nice.” Not surprisingly, veterans who had had help navigating the system reported being able to get into VA mental health services with little or “no trouble at all.” Some had formally appointed navigators, such as veterans who had been discharged from active duty as a result of a medical condition. Many had been in military treatment facilities or warrior transition units (WTUs) while awaiting separation, and all had been assigned case managers while in these units. These military case managers were identified both by veterans and VA staff as having served as liaisons with case managers at the VA, thus being able to facilitate the veteran’s transition between the Department of Defense and the VA. A clinician in Charleston, South Carolina, similarly pointed out the critical role played by navigators: “Unless they’re attached with WTU, oftentimes they do fall between cracks.”

Other veterans who reported relatively easy access indicated having informal navigators, including family members who worked for the VA, other veterans who were serving formally or informally as peer supports, and navigators working for state-sponsored veterans’ programs, such as those in Virginia, Connecticut, and South Carolina. A staff member in one of these state-run programs said, “Our goal is not to get in front of anyone else [waiting for VA services], but to help a vulnerable population get what they need.” And a veteran who had help from a military chaplain similarly commented on how such assistance is vital to being able to access care:

The chaplain was able to get me in here . . . within 24 hours. . . . I don’t know that I could have done that on my own, because I tried. The fact that it needs that is, I think, problematic. [Hampton, Virginia]

Managing Acute Distress

A second category of veterans who appear to gain timely access to VA services are those who present at a VA facility in acute distress, that is, those whose conditions indicate the potential for imminent harm to themselves or others (for example, in the case of psychiatric crisis or homelessness). VA staff reported that often these veterans will enter the system through the emergency room, but many VAMCs also have walk-in clinics where a veteran in crisis can be seen by a clinician immediately. Veterans themselves said that the system is geared more toward dealing with crises than with someone whose level of suffering is sub-acute. Said one veteran:

As soon as I [moved] here it was the initial, “Are you going to hurt yourself? Do you feel you’re going to hurt others?” No, I have no intentions of going and hurting myself. That seems to be where it stops. Everybody, they’re worried about those top three questions. [Altoona, Pennsylvania]

Although most veterans interviewed by the site visitors indicated they did not want to ask for help (much less express suicidality), one provider in Nashville suggested that the presentation of a crisis may be some veterans’ only way into care: “I know a lot of them have expressed suicidal ideations just so they can get an appointment, and that’s not how they feel. They’re not actually suicidal.”

Select Community-Based, Non-VA Services

During the site visits conducted as part of this study, VA clinicians reported referring clients to Give an Hour, an organization through which private clinicians donate their time to provide services to veterans.¹⁵ Interviewees also indicated that they were referring their clients out on a fee basis to community providers (despite some conflicting information about whether they could do that with the

¹⁵See <https://www.giveanhour.org> (accessed January 7, 2018).

implementation of Choice). Veterans reported looking for assistance outside of the VA health system, including through peer groups in the community (for example, 12-step groups for combat veterans with PTSD and women veterans' support groups). Numerous community-based organizations offer an array of activities for veterans. These include recreational outings (for example, fly fishing, hunting, and square dancing), volunteer opportunities (for example, Team Red, White, and Blue and Feed Our Vets), service dog training, job skill development (for example, culinary training), wellness services (for example, acupuncture, meditation, and yoga), peer outreach and engagement, and various college-based student veteran organizations. Most of these organizations do not provide veterans counseling services with a licensed therapist. Nevertheless, and consistent with the treatment aims of the VA, veterans are getting opportunities to step out of their isolation and engage in positive social activities with other veterans.

SUMMARY

Using information from the committee's survey, site visit, and literature research, this chapter examined the issues affecting timely access to mental health care services at the VA. A summary of the committee's findings on this topic is outlined below.

- Timely access to mental health care is variable across VA facilities.
- Wait-time data from VA's internal monitoring system underestimate reported wait times because they track wait times from the veteran's preferred date, not the initial request for services.
- The VA has begun efforts to ensure that same-day mental health appointments are available throughout the system.
- While improvements to the scheduling system are currently being implemented, the VA's current VistA scheduling system contributes to unnecessary delays in care.
- Both veterans and providers reported a variety of frustrations and concerns regarding unexplained appointment cancellations and short appointments.
- Some providers reported that intervals between appointments are often longer than they would clinically recommend.
- A majority of veterans indicated that an easier appointment process was an important change the VA could make.
- While the Veterans Access, Choice, and Accountability Act of 2014 allows eligible veterans who meet certain conditions to seek care outside of the VA, non-VA community mental health providers are in short supply in many areas and may lack the training and expertise to deliver high-quality care for conditions such as PTSD.
 - The network of mental health providers providing care under the Veteran's Choice Program is expanding; however, sharing medical records between the VA and community providers and the coordination of care for veterans who are using the Veteran's Choice Program continues to be a challenge for the VA to manage.
- Navigators and case managers facilitate access to mental health care at the VA; however, these resources are limited and are not available to all veterans.
- While efforts to improve the VistA scheduling system have begun, it is unclear if they are adequately addressing certain problems, such as capturing the necessary data to maximize clinical efficiency.

REFERENCES

- Commission on Care. 2016. *Final report of the Commission on Care*. Washington, DC: Commission on Care.
- GAO (Government Accountability Office). 2012. *VA health care: Reliability of reported outpatient medical appointment wait times and scheduling oversight need improvement*. Washington, DC: Government Accountability Office.
- GAO. 2013. *VA health care: Reported outpatient medical appointment wait times are unreliable*. GAO-13-363T. Washington, DC: Government Accountability Office.
- GAO. 2014. *VA health care: Ongoing and past work identified access problems that may delay needed medical care for veterans*. GAO-14-509T. Washington, DC: Government Accountability Office.
- GAO. 2015. *VA mental health: Clearer guidance on access policies and wait-time data needed*. Washington, DC: Government Accountability Office.
- GAO. 2016a. *VA health care: Actions needed to improve access to primary care for newly enrolled veterans*. Washington, DC: Government Accountability Office.
- GAO. 2016b. *Veteran Crisis Line: Additional testing, monitoring, and information needed to ensure better quality service*. Washington, DC: Government Accountability Office.
- GAO. 2016c. *Improved oversight of community care physicians' credentials needed*. Washington, DC: Government Accountability Office.
- GAO. 2017a. *High risk series: Progress on many high-risk areas, while substantial efforts needed on others*. Washington, DC: Government Accountability Office.
- GAO. 2017b. *Veterans Crisis Line: Further efforts needed to improve services*. Washington, DC: Government Accountability Office.
- GAO. 2017c. *Veterans health care: Preliminary observations on veterans' access to Choice Program care*. Washington, DC: Government Accountability Office.
- Hepner, K. A., S. M. Paddock, K. E. Watkins, J. Solomon, D. M. Blonigen, and H. A. Pincus. 2014. Veterans' perceptions of behavioral health care in the Veterans Health Administration: A national survey. *Psychiatric Services* 65(8): 988–996.
- IOM (Institute of Medicine). 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- IOM. 2015. *Health care scheduling and access: Getting to now*. Washington, DC: The National Academies Press.
- Karras, E., N. Lu, G. Zuo, X. M. Tu, B. Stephens, J. Draper, C. Thompson, and R. M. Bossarte. 2016. Measuring associations of the Department of Veterans Affairs' suicide prevention campaign on the use of crisis support services. *Suicide and Life-Threatening Behavior* 46(4):447–456.
- Kime, P. 2016a. *VA crisis line director resigns, text messages go unanswered*. <http://www.militarytimes.com/story/veterans/2016/06/29/va-crisis-line-director-resigns-text-messages-go-unanswered/86519866/> (accessed October 12, 2016).
- Kime, P. 2016b. *VA eases method for paying choice doctors; senators remain skeptical*. <http://www.militarytimes.com/story/military/benefits/veterans/2016/03/04/va-eases-method-paying-choice-doctors-senators-remain-skeptical/81313982/> (accessed April 26, 2016).
- Martsof, G. R., A. Tomoaia-Cotisel, and T. Tanielian. 2016. Behavioral health workforce and private sector solutions to addressing veterans' access to care issues. *JAMA Psychiatry* 73(12):1213–1214.
- McIntyre, Jr., D. 2016. Statement of Mr. David J. McIntyre, Jr. to the House Committee on Veterans' Affairs. March 22, Washington, DC.
- Medica. 2016. *Appointment access and office wait time*. <https://www.medica.com/providers/administrative-resources/administrative-manuals/medica-administrative-manual/health-management-and-quality-improvement/appointment-access-and-office-wait-time> (accessed May 23, 2016).
- MITRE Corporation. 2015. *Assessment H (health information technology)*. McLean, VA: MITRE Corporation.
- Ogrysko, N. 2017. *Lawmakers see progress in veterans crisis hotline, but it's still far from "fixed."* <https://federalnewsradio.com/hearingoversight/2017/04/lawmakers-see-progress-veterans-crisis-hotline-still-far-fixed/> (accessed May 11, 2017).
- Partnership Health Plan of California. 2016. *Appointment wait time standards*. <http://www.partnershiphp.org/Members/Medi-Cal/Pages/AppointmentWaitTimeStandards.aspx> (accessed May 23, 2016).
- Peach State Health Plan. 2016. *Appointment access and availability standards*. http://www.pshpgeorgia.com/files/2015/08/PSHP-GA_Appointment-AccessandAvailabilityStandards_ver1_20150826.pdf (accessed May 23, 2016).
- Pizer, S. D., and J. C. Prentice. 2011. What are the consequences of waiting for health care in the veteran population? *Journal of General Internal Medicine* 26(Suppl 2):676–682.
- Prentice, J. C., and S. D. Pizer. 2007. Delayed access to health care and mortality. *Health Services Research* 42(2):644–662.

- RAND Corporation. 2015a. *Resources and capabilities of the Department of Veterans Affairs to provide timely and accessible care to veterans*. Santa Monica, CA: RAND Corporation.
- RAND Corporation. 2015b. *Assessment C (care authorities)*. Santa Monica, CA: RAND Corporation.
- Superior Health Plan. 2016. *Doctor visits—How soon should you be seen?* <http://www.superiorhealthplan.com/files/2011/11/AppointmentWaitTimesENG.pdf> (accessed May 23, 2016).
- Tanielian, T., C. Farris, C. Epley, C. M. Farmer, E. Robinson, C. C. Engel, M. W. Robbins, and L. H. Jaycox. 2014. *Ready to serve: Community-based provider capacity to deliver culturally competent, quality mental health care to veterans and their families*. Santa Monica, CA: RAND Corporation.
- VA (Department of Veterans Affairs). 2014a. *Federal register: Wait-time goals of the department for the Veterans Choice Program*. Washington, DC: Department of Veterans Affairs.
- VA. 2014b. *Non-VA medical care program fact sheet for interested providers*. Washington, DC: Department of Veterans Affairs.
- VA. 2014c. *Veterans Access, Choice, and Accountability Act of 2014 (“Choice Act”)*. Washington, DC: Department of Veterans Affairs.
- VA. 2015a. *Process for receiving care under PC3*. http://www.va.gov/PURCHASEDCARE/programs/veterans/nonvacare/pccc/PC3_for_Vets.asp (accessed September 29, 2015).
- VA. 2015b. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2015c. *VA expands Choice Program eligibility*. Washington, DC: Department of Veterans Affairs.
- VA. 2016a. *VA patient access data*. <http://www.va.gov/health/access-audit.asp> (accessed May 23, 2016).
- VA. 2016b. *Veteran appointment request*. <https://mobile.va.gov/app/veteran-appointment-request> (accessed October 6, 2016).
- VA. 2016c. *Veteran Crisis Line*. http://www.mentalhealth.va.gov/suicide_prevention/ (accessed October 6, 2016).
- VA. 2016d. *VistA Scheduling Enhancements (VSE)*. Washington, DC: Department of Veterans Affairs.
- VA. 2016e. *Mental health satisfaction survey: Veteran Satisfaction Survey (VSS) national results*. Washington, DC: Department of Veterans Affairs.
- VA. 2017a. *Follow up: Information request from NASEM Committee to Evaluate VA’s Mental Health Services*. Department of Veterans Affairs.
- VA. 2017b. *Response to committee request for information*. Department of Veterans Affairs.
- VA. 2017c. *State of the VA fact sheet*. Washington, DC: Department of Veterans Affairs. http://www.blogs.va.gov/VAntage/wp-content/uploads/2017/05/StateofVA_FactSheet_5-31-2017.pdf (accessed October 5, 2017).
- VA. 2017d. *VA fixes Veterans Crisis Line*. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2872> (accessed May 11, 2017).
- VA. 2017e. *Veterans Choice Program (VCP) and the future of community care*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2005. *Audit of the Veterans Health Administration’s outpatient scheduling procedures*. Washington, DC: VA Office of Inspector General.
- VA Office of Inspector General. 2007. *Audit of the Veterans Health Administration’s outpatient waiting times*. Washington, DC: VA Office of Inspector General.
- VA Office of Inspector General. 2012. *Veterans Health Administration review of veterans’ access to mental health care*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2015a. *Veterans Health Administration review of Patient-Centered Community Care (PC3) provider network adequacy*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2015b. *Review of alleged delays in VHA care caused by Patient-Centered Community Care (PC3) issues*. Washington, DC: Department of Veterans Affairs.
- VA Office of Inspector General. 2016. *Administrative summaries of investigation regarding wait time*. <http://www.va.gov/oig/publications/administrative-summaries-of-investigation.asp> (accessed May 19, 2016).
- VA Office of Inspector General. 2017a. *Healthcare inspection: Evaluation of the Veterans Health Administration Veterans Crisis Line*. Washington, DC: VA Office of Inspector General.
- VA Office of Inspector General. 2017b. *Veterans Health Administration: Audit of veteran wait time data, choice access, and consult management in VISN 6*. Washington, DC: VA Office of Inspector General.

10

Patient-Centered Care and the Veteran Experience

Providing care centered on the needs and expectations of patients is a key attribute of quality health care (IOM, 2001). The patient-centered care model is a shift away from a “disease-based” approach to health care, instead targeting multiple determinants of health, including physical, emotional, mental, social, spiritual, and environmental influences. Important features of patient-centered care include increasing the engagement of patients in care and shared decision making between patients and clinicians. Research shows that patient-centered care approaches to health care delivery improve health outcomes, increase patient satisfaction, and enhance health care-seeking behavior and self-management (Rathert et al., 2013). Various initiatives in the private sector and under the Patient Protection and Affordable Care Act have driven efforts to promote a patient-centered health care system in the United States (Millenson and Macri, 2012). This chapter describes key patient-centered care initiatives at the Department of Veterans Affairs (VA).

In addition, this chapter includes findings from the committee’s survey and site visit research about veterans’ and clinicians’ perceptions of and experiences with patient-centered care within VA mental health services. Understanding the patient experience is an important step in moving toward patient-centered care (AHRQ, 2017). The patient experience includes several aspects of health care delivery that patients value highly when they seek and receive care, such as getting timely appointments, having easy access to information, and having good communication with health care providers. By looking at the interactions that patients have with the health care system as a whole and with doctors, nurses, and staff, it is possible to assess the extent to which patients are receiving care that is respectful of and responsive to individual patient’s preferences, needs, and values (AHRQ, 2017).

PATIENT-CENTERED CARE AT THE VETERANS HEALTH ADMINISTRATION

Whole Health Initiative

The number one strategic goal of the VA for fiscal years 2013–2018 is to provide veterans personalized, proactive, and patient-driven health care (VA, 2013). The VA has organizational structures and initiatives dedicated to delivering care that is driven by the individual needs of the veteran. The lead agency in this regard is the Office of Patient Centered Care and Cultural Transformation (OPCC&CT), established in 2011. A major system-wide initiative under way is Whole Health, which is described as placing the veteran at the center of the health care experience and health care practice, with healing environments, healing relationships, and a focus on creating a personalized, proactive, patient-driven experience (Rindfleisch, 2016).

OPCC&CT works with VA leadership and program offices to engage veterans and staff in order to advance the Whole Health approach at all VA facilities. In addition to facilitating collaborative patient-centered care, OPCC&CT provides educational offerings to clinicians and staff (Dobscha et al., 2016). In a VA all-employee survey of 135,000 staff members, over 83 percent said they understand their role in providing personalized, proactive, and patient-driven health care (VA, 2016b).

As discussed in the section on patient experiences below, a significant number of veterans talk about VA care in positive terms. However, continued leadership and innovation are needed to firmly establish a new culture of patient-centered care consistent with the Whole Health approach. Veterans and staff participating in the committee's survey and site visit research described various system- and facility-level obstacles to patient-centered care at the VA. For example, short staffing, employee turnover, professional burnout, and other workforce issues discussed in Chapter 8 were reported to interfere with the quality of the relationship between the veteran and clinician. More attention to these areas will improve the quality of the care given and the patient's experience.

Patient-Centered Mental Health Care

Collaborative Care Models

The VA offers veterans primary care and mental health care using a patient-centered model of team-based care. In the U.S. health care system, the patient-centered medical home (PCMH) is a widely accepted model for improving care coordination, quality, access, and cost effectiveness. PCMH implementation places the primary care provider in the key role of managing and coordinating a person's overall health care (Patient-Centered Primary Care Collaborative, 2015). The integration of mental health care and primary care, or "integrated care," is a component of the patient-centered medical home model (Gerrity, 2016).

In primary care clinics, the VA implements the medical home model through the Patient Aligned Care Team (PACT) initiative, which was launched nationally in 2010 (Yano et al., 2014). Mental health providers are integral to PACTs, as they support collaborative, primary care-based treatment of mental health conditions. For veterans seen in outpatient mental health clinics, the VA provides integrated care through the Behavioral Health Interdisciplinary Program (BHIP). BHIP teams serve as the clinical home for veterans using outpatient general mental health services, in the same way that PACT serves as the clinical home for patients using primary care services. BHIP teams, which can include psychologists, psychiatrists, psychiatric nurses, social workers, peer support specialists, and administrative staff, hold regular interdisciplinary team meetings to facilitate teamwork and provide the staff with dedicated time to discuss veteran care, establish treatment goals, and review other issues as they arise (Barry et al., 2016).

Chapter 12 further discusses care integration at the VA and the evidence supporting patient-centered, collaborative care models.

In other examples of patient-oriented care delivery, the VA has replaced its legacy day treatment and day hospital programs with recovery-oriented psychosocial rehabilitation and recovery centers (PRRCs). PRRCs are outpatient treatment programs that serve an important role in the continuum of care from inpatient services to outpatient services. PRRCs deliver group and individual recovery services for veterans with serious mental illnesses and significant functional impairment, with the goal being to help the veteran integrate into his or her community (VA, 2017a). In addition, the VA has deployed local recovery coordinators (LRCs) in every VA health care system. LRCs provide education, training, and consultation in an effort to transform the VA's mental health services to a recovery-oriented system of care (VA, 2017a).

Finally, as discussed later in the chapter, the VA provides standardized “soft skills” training (focused on communication skills, stress reduction, and veteran suicide prevention) for mental health support staff and appointment schedulers across the health system (VA, 2017a).

Patient Engagement in Mental Health Care

Studies show that “activated” individuals engage more in self-management (through medication adherence, diet, exercise), disease prevention (such as health screenings), and health information seeking (Chinman et al., 2017). Having effective strategies to better engage veterans in their care is critical to improving the quality of care at the VA. As discussed in Chapter 11, studies show that a large proportion of veterans are not receiving adequate treatment following a diagnosis of posttraumatic stress disorder (PTSD), alcohol or other substance use disorder, or depression—suggesting a need for greater patient engagement in care.

The VA's recent efforts to improve patient-centered care and increase engagement include the creation of treatment decision aids. The National Center for PTSD launched an online PTSD treatment decision aid in March 2017.¹ This decision aid helps patients learn about the benefits and risks of evidence-based treatment options and guides them in clarifying their preferences and treatment goals (VA, 2017a).

The VA is also expanding its peer support program to support veterans needing care and to further position the mental health system toward recovery-oriented services. Peer specialists are veteran employees who have made a significant recovery from mental illness or substance use disorders and who are trained to provide ongoing support to other veterans with similar disorders. There is emerging evidence that peer specialists improve patient activation or engagement in care (Chinman et al., 2017). The VA now has almost 1,100 peer specialists deployed in a variety of mental health programs. Pilot programs are under way to integrate peer specialists into primary care and also into wellness recovery action planning (VA, 2017a).

Other engagement activities at the VA include a public awareness campaign, Make the Connection,² which encourages veterans, service members, and their families to use information and resources, including mental health treatments, and other sources of support, such as veterans like themselves (VA, 2017a). The VA is also giving attention to physical space improvements through efforts to update the standards for state-of-the-art outpatient mental health facilities. This “design guide” provides specifics on how to make mental health treatment settings warm, inviting, and patient centered (VA, 2017a).

¹ See www.ptsd.va.gov/decisionaid (accessed January 7, 2018).

² See www.maketheconnection.net (accessed January 7, 2018).

Complementary and Integrative Health

Complementary and integrative health (CIH), also known as complementary and alternative medicine, includes an array of interventions—such as yoga, equine therapy, meditation, acupuncture, and nutritional supplements—that are not considered standard practice in medicine. Promising findings exist for some CIH approaches for some conditions (Bergen-Cico et al., 2014; Engel et al., 2014; Serpa et al., 2014); however, more effectiveness research on CIH approaches is needed (IOM, 2013; Strauss et al., 2011). CIH therapies are often used to supplement more conventional, evidence-based medicine (Libby et al., 2012).

CIH approaches are frequently requested and used by veterans receiving mental health care, and the VA is responding to this interest in alternative modalities of care. Under the VA OPCC&CT, the Integrated Health Coordinating Center serves as the principal advisor to the Under Secretary for Health on CIH-related strategy and operations. The center supports clinical standardization and coordinates the expansion of CIH throughout the VA system (VA, 2016a). A recent policy directive (VA, 2017b) stipulates that practitioners are to offer veterans, as appropriate, any of the CIH approaches approved by the Under Secretary for Health. There is a specified set of CIH modalities that must be available to veterans (either in a VA facility or in the community) and a list of optional approaches that may be provided within the limits of individual VAMCs (VA, 2017a).

The implementation of CIH modalities within VA mental health services is determined at the local level based upon identified demand and available resources. Many facilities have implemented yoga, relaxation training, and tai chi, for example (VA, 2017a). In 2015, 93 percent of VA parent facilities offered at least one CIH service (VA, 2017a). A 2011 survey found that nearly all (96 percent) of VA PTSD treatment programs offered at least one CIH approach. The most commonly offered CIH modalities were mindfulness, stress-management relaxation therapy, progressive muscle relaxation techniques, and guided imagery (Libby et al., 2012).

One recent study, however, found that while many veterans are using CIH, a majority of them are doing so outside the VA (Reinhard et al., 2014). Another study found great variation regarding which CIH modalities are used by Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) veterans (Park et al., 2016). While 40.5 percent of the veterans surveyed used CIH in the 12 months prior to the survey, more than half used massage and nearly half used a nutritional product or meditation. Women were more likely to use CIH than men for nearly all modalities, particularly yoga, meditations and prayer, and acupuncture. Experiencing sexual harassment was also a predictor of CIH usage, as was poorer physical or mental health and higher perceived stress (Park et al., 2016).

VETERAN EXPERIENCES WITH RECEIVING MENTAL HEALTH CARE AT THE VETERANS HEALTH ADMINISTRATION

As mentioned above, understanding the patient experience is key to improving patient-centered care. Using data from the committee's survey of veterans and site visit interviews, this section examines perspectives from veterans and VA staff on various aspects of patient-centered care at the VA. The information gathered provides insights into the extent to which veterans are receiving care that is respectful of and responsive to individual patient preferences, needs, and values.

Findings from the committee's survey and site visit research demonstrate that a significant number of veterans describe VA patient care in positive terms. The survey asks veterans about their experiences with VA mental health services in terms of, for example, the helpfulness of the provider, satisfaction with care, and the impact on the veteran's quality of life. Some questions were asked of all service users, including VA and non-VA. Other questions were asked only about VA services for those who used them.

TABLE 10-1 Experience of Care among OEF/OIF/OND Veterans Who Use VA Mental Health Services

Experience of Care Survey Questions	Unweighted n	Weighted N	Weighted %	SE %
<i>Did a VA mental health provider tell you there was more than one choice for your treatment?</i>				
Yes	371	203,961	44.5%	1.8%
<i>Did the VA mental health provider you have seen most recently help you?</i>				
A lot	293	154,005	33.6%	1.7%
Some	241	133,282	29.1%	1.6%
A little	146	86,326	18.9%	1.5%
Not at all	114	71,242	15.6%	1.5%
Refused	7	4,436	1.0%	0.4%
Missing	17	8,672	1.9%	0.5%
<i>How satisfied are you with your mental health care at the VA in the past 24 months?</i>				
Completely satisfied	132	70,359	15.4%	1.4%
Very satisfied	183	97,713	21.3%	1.4%
Somewhat satisfied	200	110,680	24.2%	1.9%
Neither satisfied nor dissatisfied	85	49,168	10.7%	1.3%
Somewhat dissatisfied	77	44,877	9.8%	1.1%
Very dissatisfied	55	36,483	8.0%	1.2%
Completely dissatisfied	68	39,454	8.6%	1.1%
Refused	3	1,843	0.4%	0.2%
Missing	15	7,385	1.6%	0.5%
<i>In the past 24 months, what effect has VA treatment you got had on your quality of life?</i>				
Very helpful	256	135,101	29.5%	2.0%
A little helpful	283	163,152	35.6%	2.1%
Not helpful or harmful	198	112,698	24.6%	1.6%
A little harmful	37	22,329	4.9%	0.8%
Very harmful	17	10,550	2.3%	0.6%
Refused	5	2,909	0.6%	0.3%
Don't know	1	930	0.2%	0.2%
Missing	21	10,293	2.2%	0.6%
<i>In the past 24 months, did you end VA mental health treatment before the provider wanted you to?</i>				
Yes	209	122,272	26.7%	1.7

NOTE: Responses may not sum to 100% due to rounding. Missing includes skipped items.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Overall, veterans who use VA mental services reported positive care experiences on a number of questions, but there is substantial room for improvement. As Table 10-1 shows, 63 percent of survey respondents who use VA mental services indicated that their VA mental health provider helped them either some or a lot, and 61 percent were at least somewhat satisfied with the care they received. Sixty-five percent reported that they found the effect of care on their quality of life at least a little helpful. Seventy-three percent of users indicate that they did not end treatment before their mental health providers wanted them to. However, less than half (45 percent) of VA users said they were offered more than one choice for mental health care.

TABLE 10-2 Statistically Significant Predictors of Mental Health Outcomes

Among OEF/OIF/OND veterans who use VA mental health care, adjusted odds ratios of responding that their VA mental health provider helped them a lot

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Education	Some college	0.431*	0.194	0.961
Education	Associate's or bachelor's degree	0.448*	0.210	0.958
Income	\$25,000 to \$49,999	1.820*	1.046	3.168
Depression score	Continuous	0.862*	0.757	0.981
ATSPPH	Continuous	1.181**	1.133	1.231

NOTES: 849 unweighted cases initially available, 188 unweighted cases excluded due to missing responses. Model includes 661 unweighted cases representing weighted N of 373,009. Reference categories for the variables are shown in Tables 6-10 and 6-20. * $p < .05$; ** $p < .01$; CL = confidence limit; standard error units are not comparable to odds ratio.

Among OEF/OIF/OND veterans who use VA mental health care, the adjusted odds ratio of responding being very or completely satisfied with mental health care at VA

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Race	Non-Hispanic black only	2.048*	1.100	3.816
Alcohol dependence score	Continuous	0.956*	0.922	0.993
Depression score	Continuous	0.755**	0.650	0.877
ATSPPH	Continuous	1.126**	1.083	1.170

NOTES: 849 unweighted cases initially available, 188 unweighted cases excluded due to missing responses. Model includes 661 unweighted cases representing weighted N of 373,366. Reference categories for the variables are shown in Tables 6-10 and 6-20. * $p < .05$; ** $p < .01$; CL = confidence limit; standard error units are not comparable to odds ratio.

Among OEF/OIF/OND veterans who use VA mental health care, the adjusted odds ratio of responding that their VA treatment had a very helpful effect on their quality of life

Variable	Variable Value	Odds Ratio	Lower CL	Upper CL
Race	Non-Hispanic black only	2.654**	1.492	4.721
Deployment Time	25–36 months	0.383*	0.180	0.813
Depression score	Continuous	0.709**	0.613	0.821
ATSPPH	Continuous	1.147**	1.095	1.201
Encouraged to get help	Continuous	0.519*	0.286	0.942

NOTES: 849 unweighted cases initially available, 190 unweighted cases excluded due to missing responses. Model includes 659 unweighted cases representing weighted N of 371,524. Reference categories for the variables are shown in Tables 6-10 and 6-20. * $p < .05$; ** $p < .01$; CL = confidence limit; standard error units are not comparable to odds ratio.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Three of the above variables—how much your VA mental health provider helped you, how satisfied you were with the care you received, and the effect of your treatment on your quality of life—constitute the patient-reported outcomes of care. To determine whether these outcomes differed by gender, race, or other veteran characteristics, the committee conducted logistic regression analyses to identify the predictors of these outcomes. (See Chapter 6, Tables 6-10 and 6-20, for a complete list of independent variables, including reference categories, used in the regression models.) A summary of statistically significant predictors is presented in Table 10-2. For all three of the outcomes more favorable attitudes toward seeking mental health treatment predicted better outcomes (provider helped a lot, more satisfied

with care, and very helpful effect on quality of life). In contrast, for all three self-reported outcomes, higher depression scores predicted worse outcomes. Further research is needed to understand why veterans with higher reported levels of depressive symptoms report lower satisfaction with mental health care at the VA. For two of the three self-reported outcomes (more satisfied with care and very helpful effect on quality of life), being of non-Hispanic black race predicted better outcomes, indicating that non-Hispanic blacks reported higher satisfaction and helpfulness of mental health treatment than whites, thus not supporting concerns about racial disparities in perceived mental health treatment. Income from \$25,000 to \$49,000 predicted a higher likelihood of being helped a lot by the veteran's VA mental health provider. Other variables that significantly predicted worse outcomes on one of the three outcome measures included some college or bachelor's degree, higher alcohol dependence score, deployment time of 25–36 months, and encouragement from others to get help.

Interview data collected on the site visits illustrates some of the challenges that the VA faces in meeting patients' preferences, needs, and values. The overwhelming demand for mental health services in some areas is one of the biggest factors in this regard. In fact, the most common complaint of veterans interviewed by the site visit teams was that their mental health appointments were rushed and their concerns were not heard by providers. A veteran explained, "As you're talking, they're sitting there typing the whole time" [Cleveland, Ohio]. Yet another veteran noted: "It's simply check the box. . . . 'Are you suicidal?' 'No.' 'All right, I'll schedule you for 6 months [from now]'" [Cleveland, Ohio]. Veterans described service as "impersonal" [Hampton, Virginia; Palo Alto, California; Washington, DC], "cold, indifferent" [Palo Alto, California], or "robotic" [Temple, Texas]. Veterans described "assembly-line counseling" [Nashville, Tennessee]. One commented:

[If] you don't fit in the box, get into the next box. This box doesn't work, [so go to] the next box." Once you get to the end of the boxes, they go, "Let's start over. Maybe this one will work again." They tried EMDR [eye movement desensitization and reprocessing]. Did not work. I just started again about a week ago with prolonged exposure. [Cleveland, Ohio]

Another veteran explained that the psychotherapy groups at the VA are so highly structured that they prevent members from getting their needs addressed: "[There is] no kind of meaningful exchange about any of this stuff." [Washington, DC]

VA providers likewise expressed frustration with not being able to provide treatments that are more personalized to individual needs. A VA clinician explained,

[There's] not a lot of support to do things that are therapeutically indicated sometimes. A lot of times we're pigeonholed into certain things . . . when people may need some more out-of-the-box interventions. [Palo Alto, California]

A VA provider in Charleston, South Carolina, explained, "Sometimes veterans may feel as though they are being referred to as non-compliant if they don't make it through—like an evidence-based treatment program, PE [prolonged exposure] protocols, that kind of thing—when they may not exactly fit the mold."

The quotes above reveal some of the challenges of delivering evidence-based care, which is best evidence integrated with clinical expertise and patient values (IOM, 2001). The balance between the use of standardized, validated treatment protocols and the desire for flexibility to maintain patient engagement is further examined in Chapter 11, which describes research examining provider adherence to treatment protocols (fidelity to treatment) and reports on veteran and clinician perceptions about evidence-based treatments.

With respect to the VA's lack of capacity to meet the demand for psychotherapy (see discussion about staffing levels in Chapter 8 and studies showing undertreatment in Chapter 11), systemic strains

seem to contribute to the perception among veterans that the VA would treat mental health symptoms with medication rather than with psychotherapy. For example, a veteran in Palo Alto, California, said, “It’s ‘take these pills, and we’ll get you when we can,’ but I still don’t have a mental health person to talk to.” Veterans frequently said they were able to get appointments for medication evaluation much sooner than for psychotherapy.

VA clinician interviewees also reported that psychotherapy is in great demand and thus frequently in short supply, whereas medication management is relatively more available. However, medications are not always a desired treatment option. One clinician from Palo Alto explained that among the OEF/OIF/OND veterans, “A lot of young guys do not want to be on medications. They find it stigmatizes. They’re worried about addiction to it, being reliant on it, or the side effects. The thought of doing it for the rest of their life is scary.”

Many veterans interviewed said they preferred receiving mental health services from providers with experience in the military culture, a preference that the VA is not always able to meet. At a fundamental level, veterans did not want to have to waste time explaining military basics to the person who was supposed to be able to help them with issues derived from that military experience. A veteran explained her experience with a VA psychiatrist:

This guy didn’t know the first thing about rank structure. I saw him about three times spread out over 3 months. I gave it a try. [Temple, Texas]

More profoundly, however, veteran interviewees described the frustration of trying to put their combat experiences into words:

They [non-veteran clinicians] don’t know the experience. . . . they will never know the truth. There are a lot of things we don’t know how to express in words. [Palo Alto, California]

. . . you’re talking about experiences that are haunting you. . . . [They need to] understand what a bullet sounds like flying by your head. All they’re doing is: “Mm-hmm,” and “Wow. Okay, what was your experience like?” It’s like talking to a wall . . . why even dig deeper if you’re not understanding this? [San Diego, California]

When non-veteran providers failed to understand the psychological and emotional difficulty of combat experiences, veterans were likely to leave therapy feeling offended. For example, a veteran who dropped out of treatment at the VA explained, “They weren’t a vet . . . and it just wasn’t working at all. It felt like they were patronizing me” [Altoona, Pennsylvania]. Another veteran explained: “She’s never served a day in her life and yet she’s trying to sit there, ‘I understand.’ What the f— do you understand? I went to combat. I’ve been blown up. Our bodies got blown up to pieces.” [Washington, DC]

Similarly, some veterans worried about being morally judged by non-veteran providers for actions committed in combat. One veteran in Washington, DC, told an interviewer, “If I go into the [mental health clinic] there, as often as not, I feel like I’m getting judged. I think that’s a big problem.” A provider currently in private practice who had completed a clinical internship at a VA explained that psychotherapists need to suspend “non-veteran morality”:

[Veterans] get a lot of that “Whoa, how could you have done that?” There can’t be any reactions like that. . . . Killing is what they do in combat. . . . You cannot put that non-veteran morality on them. [Washington, DC]

However, as reported in Chapter 8, data from the committee’s survey show that the majority of VA users with a mental health need have a positive experience with VA mental health providers. For example, Table 8-4 shows 69 percent reported their mental health provider understands their background and val-

ues. However, about one in five veterans feel less positive: 23 percent believed that their provider looks down on them, and 21 percent indicated they do not feel welcome in their mental health provider's office.

Those interviewees on the site visits who were satisfied with their care often pointed to ways their values and preferences had been accommodated by their individual providers. These veterans reported that they felt that their provider respected their preferences for treatment, honored their experiences as former military members, understood what they (the veteran) felt was important, and cared about them. One veteran from Charleston, South Carolina, explained, "The person who I talked to was very open and welcoming, and from there on, it's been nothing but good." A veteran in Tampa, Florida described his doctor this way: "She was very knowledgeable and kept me in mind. . . . I trusted her completely and things worked out pretty good." Yet another veteran in Seattle, Washington, said, "I'm thoroughly impressed and amazed by the treatment I have received at this hospital. . . . it's always been my option to do what I want to do [for treatment]."

Those who reported accepting pharmacotherapy said they felt more confident about the medication when the prescriber had made an effort to get to know them, rather than only "throwing pills" at them. For example, a veteran who was being treated by a psychotherapist outside of the VA system said she consulted a VA provider for medication:

When I went into the CBOC, I said "I'm only here because I need a prescription." . . . [S]he wanted to talk to me and get to know me as a human before giving me pills—which I appreciated. [Seattle, Washington]

Veterans who worked successfully with non-veteran providers at the VA found that non-veteran providers' attitudes of respect and humility during veterans' combat disclosures went a long way toward making up for a lack of experiential understanding of war. A veteran who was among the first group to return from Iraq explained how, while his therapy was a little "bumpy in the beginning," his VA psychotherapist was honest and humble about his lack of firsthand understanding:

He [therapist] said, ". . . because we haven't experienced being in a combat zone, we can't really get a picture of what that is like." I brought in some photos that I had. I said, "This is what I used to see every day." Then he was like, "Okay, now I get it." [Washington, DC]

This veteran reported he was "100 percent satisfied" with his mental health care at the VA, largely because of the excellent relationship he had been able to establish with his individual therapist.

Interactions with Support Staff

In response to the committee's inquiry about efforts to provide customer service training and to evaluate the performance of front-line staff (VA, 2017a), the VA responded that a standardized "soft skills" training (focused on communication skills, stress reduction, and veteran suicide prevention) for medical support assistants (MSAs) has been disseminated nationally. Another required training (consisting of a series of webinars and a video), called My VA Access Mental Health Initiative: The Critical Role of Schedulers in Getting Veterans to Care, was launched in 2016 and has been completed by over 50,000 scheduling staff. The VA reported that there is currently no national metric for assessing MSAs on customer service skills; however, supervisors are expected to conduct ongoing reviews of staff members' competency in providing customer service.

Despite the VA's customer service training efforts, the committee found challenges with communications about the appointment process, which are discussed in Chapter 9, as well as frequent veteran reports of negative interactions with VA support staff. Results from the committee's survey showed that 16 percent of veterans with mental health needs rated the staff's courtesy and respect toward patients

as being somewhat or extremely negative. On the other hand, more than three-quarters of all veterans surveyed indicated that better quality services (78 percent) and better customer service (77 percent) are important changes that the VA could make (Table 6-34). Similarly, veterans on all 21 site visits complained about poor interactions with support staff at the VA, typically from front desk clerks and receptionists. Veterans reported that they often have interactions with front line VA staff that are off-putting, and some reported leaving before they even completed their clinical appointments. Common words used by veterans to describe interactions with these VA staff members include “rude,” “bad attitude,” “unprofessional,” “unhelpful,” “insensitive,” and “disrespectful.” Behaviors that elicited complaints included not knowing the answers to questions and not offering to find out, taking personal phone calls while at their desk, using social media to connect with their friends while at work, acting like the veteran is inconveniencing them, and not making eye contact with the veteran.

These actions can directly affect a veteran’s willingness to continue to seek care from the VA. As one veteran from Washington, DC, said, “To treat me the way they did made me want to leave. I didn’t want to be part of the VA.”

Some veterans said that they had attempted to report negative interactions with staff both to patient advocates and to supervisors, with little to no success. One veteran in Altoona, Pennsylvania, said that after he filed a complaint, the employee called him and “yelled at me because I called patient advocates on her.” Another veteran in Charleston, South Carolina, reported calling a supervisor about a “rude” clerk in eligibility, but did not get a call back. This apparent lack of accountability was a theme expressed by other veterans, with one veteran stating that “Nothing happened to that lady who was just rude as hell to me. There’s no accountability in the system.” [Biloxi, Mississippi]

VA clinicians also reported hearing the same complaints, noting that the lack of respect from the front-line staff was either turning veterans off or causing them to come into their appointments upset and frustrated. One VA clinician said he felt that the MSAs had “management incompetency,” and many in VA clinical leadership voiced frustration that they have no authority over their own MSA staff. One former VA employee who recently left to start her own practice noted that the MSAs’ actions were hurting the therapeutic alliance. She commented,

If they [veterans] enter a place where they’re not being treated with respect and they’re already triggered by the time they get to you, it’s hard for them to say, “Yeah, I’m going to trust you enough to tell you these things.” [Washington, DC]

Veterans also commented that they were afraid to show agitation or voice their feelings because they were afraid the clerk would call security on them. One veteran reported that when he was frustrated the clerk stated, “Sir, if you keep this up I am going to call security.” Clinicians relayed the same thing, with one adding that “the doctors wind up taking the brunt of it.” [Cleveland, Ohio]

Finally, some veterans asserted that one of the reasons for the lack of respect comes from an assumption that veterans are working the system to secure as many financial benefits as possible. One veteran commented, “[A]n attitude [that] a lot of the people at the VA have is, ‘You’re just collecting a paycheck from us, so you just hang out and watch *Maury* [Povich] all day.’” [Temple, Texas]

SUMMARY

Using information from the committee’s survey, site visit, and literature research, this chapter examined and described patient-centered care initiatives in place at the VA. Further, it described patient and provider experiences with patient-centered care. A summary of the committee’s findings on this topic is outlined below.

- The VA has a centralized office (Office of Patient Centered Care and Cultural Transformation) and system-wide initiatives, such as *Whole Health*, patient-aligned care teams, and CIH modalities of care, which align with and support a focus on patient-centered care.
- Some of the VA's notable recent efforts to improve patient-centered care and increase engagement include the creation of a PTSD treatment decision aid and an expansion of the peer support program.
- Findings from the committee's survey research demonstrate that a majority of veterans (69 percent) report that their providers understand their background and values. Committee site visit interviews supported this finding.
- However, only 45 percent of veterans reported being told they had more than one choice of treatment options.
- Non-Hispanic black veterans were more likely to be satisfied with the care they received and more likely to report that their treatment from the VA had a very helpful effect on their quality of life than were non-Hispanic white veterans.
- Continued leadership and innovation are needed to firmly establish a culture of patient-centered care at the VA.
- Experiences reported by veterans and staff who do not seem to view the VA as patient-centered largely reflect system- and facility-level obstacles, including workforce issues (short staffing, employee turnover, professional burnout) and difficult interpersonal interactions such as challenging communications about the appointment process, complaints about service and attitudes from support staff, and a lack of providers with experience in the military culture.
- Recent initiatives, such as the standardized "soft skills" training for medical support assistants, have begun to address a number of these issues.
- The committee findings suggest the VA must continue to gather input from veterans and staff to better understand its shortcomings in meeting veterans' expectations, needs, and values.

REFERENCES

- AHRQ (Agency for Healthcare Research and Quality). 2017. *What is patient experience?* <https://www.ahrq.gov/cahps/about-cahps/patient-experience/index.html> (accessed June 25, 2017).
- Barry, C. N., K. M. Abraham, K. R. Weaver, and N. W. Bowersox. 2016. Innovating team-based outpatient mental health care in the Veterans Health Administration: Staff-perceived benefits and challenges to pilot implementation of the behavioral health interdisciplinary program (BHIP). *Psychological Services* 13(2):148–155.
- Bergen-Cico, D., K. Possemato, and W. Pigeon. 2014. Reductions in cortisol associated with primary care brief mindfulness program for veterans with PTSD. *Medical Care* 52:S25–S31.
- Chinman, M., K. Daniels, J. Smith, S. McCarthy, D. Medoff, A. Peeples, and R. Goldberg. 2017. Provision of peer specialist services in VA patient aligned care teams: Protocol for testing a cluster randomized implementation trial. *Implementation Science* 12(1):57.
- Dobscha, S. K., R. Cromer, A. Crain, and L. M. Denneson. 2016. Qualitative analysis of U.S. Department of Veterans Affairs mental health clinician perspectives on patient-centered care. *International Journal for Quality in Health Care* 28(3):355–362.
- Engel, C. C., E. H. Cordova, D. M. Benedek, X. Liu, K. L. Gore, C. Goertz, M. C. Freed, C. Crawford, W. B. Jonas, and R. J. Ursano. 2014. Randomized effectiveness trial of a brief course of acupuncture for posttraumatic stress disorder. *Medical Care* 52:S57–S64.
- Gerrity, M. 2016. *Evolving models of behavioral health integration: Evidence update 2010–2015*. New York: Milbank Memorial Fund.
- IOM (Institute of Medicine). 2001. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.
- IOM. 2013. *Returning home from Iraq and Afghanistan: Assessment of readjustment needs of veterans, service members, and their families*. Washington, DC: The National Academies Press.

- Libby, D. J., C. E. Pilver, and R. Desai. 2012. Complementary and alternative medicine in VA specialized PTSD treatment programs. *Psychiatric Services* 63(11):1134–1136.
- Millenson, M. L., and J. Macri. 2012. Will the Affordable Care Act move patient-centeredness to center stage? *Timely Analysis of Immediate Health Policy Issues*. Urban Institute. <https://www.rwjf.org/content/dam/farm/reports/reports/2012/rwjf72412> (accessed October 6, 2017).
- Park, C. L., L. Finkelstein-Fox, D. M. Barnes, C. M. Mazure, and R. Hoff. 2016. CAM use in recently-returned OEF/OIF/OND U.S. veterans: Demographic and psychosocial predictors. *Complementary Therapies in Medicine* 28:50–56.
- Patient-Centered Primary Care Collaborative. 2015. *Defining the medical home*. <https://www.pcpcc.org/about/medical-home> (accessed April 29, 2015).
- Rathert, C., M. D. Wyrwich, and S. A. Boren. 2013. Patient-centered care and outcomes: A systematic review of the literature. *Medical Care Research and Review* 70(4):351–379.
- Reinhard, M. J., T. H. Nassif, K. Bloeser, E. K. Dursa, S. K. Barth, B. Benetato, and A. Schneiderman. 2014. CAM utilization among OEF/OIF veterans: Findings from the National Health Study for a new generation of U.S. veterans. *Medical Care* 52(12 Suppl 5):S45–S49.
- Rindfleisch, J. A. 2016. *Passport to whole health: A personal health planning reference manual*. Madison, WI: University of Wisconsin Integrative Health.
- Serpa, J. G., S. L. Taylor, and K. Tillisch. 2014. Mindfulness-based stress reduction (MBSR) reduces anxiety, depression, and suicidal ideation in veterans. *Medical Care* 52:S19–S24.
- Strauss, J. L., R. Coeytaux, J. McDuffie, A. Nagi, and J. W. Williams, Jr. 2011. *Efficacy of complementary and alternative medicine therapies for posttraumatic stress disorder*. Washington, DC: Department of Veterans Affairs.
- VA (Department of Veterans Affairs). 2013. *VHA strategic plan: FY 2013–2018*. Washington, DC: Department of Veterans Affairs.
- VA. 2016a. *Advancing complementary and integrative health*. https://www.va.gov/PATIENTCENTEREDCARE/features/Advancing_Complementary_and_Integrative_Health_in.asp (accessed April 19, 2017).
- VA. 2016b. *Spotlight: Employee engagement in depth*. <https://www.hsrd.research.va.gov/news/feature/engagement-indepth.cfm> (accessed April 4, 2017).
- VA. 2017a. *Response to committee request for information*. Department of Veterans Affairs.
- VA. 2017b. *VHA directive 1137: Provision of complementary and integrative health (CIH)*. Washington, DC: Department of Veterans Affairs.
- Yano, E. M., M. J. Bair, O. Carrasquillo, S. L. Krein, and L. V. Rubenstein. 2014. Patient aligned care teams (PACT): VA's journey to implement patient-centered medical homes. *Journal of General Internal Medicine* 29(2):547–549.

11

Effective Mental Health Care

An effective health care system, as defined by the Institute of Medicine, is one that provides “services based on scientific knowledge to all who could benefit and refrains from providing services to those not likely to benefit” (IOM, 2001, p. 39). The use of evidence-based care to treat mental health problems has been shown to be associated with symptom reduction and reduced morbidity and mortality among patients. Conversely, the consequences of inadequate care for people with mental health conditions are well known and include an increased risk of disability and impairment, adverse health behaviors, poor health outcomes, and higher health system costs (Collins et al., 2010; Harpaz-Rotem and Rosenheck, 2011; Kessler et al., 2001; Wang et al., 2005).

To answer the question of whether the Department of Veterans Affairs (VA) provides evidence-based mental health treatments to veterans, this chapter examines the availability of evidence-based practices in the VA system, the quality of mental health providers, and the provision of mental health care to veterans. The section dealing with that third issue examines whether veterans are receiving adequate treatment, the factors associated with receiving treatment, and patient engagement in care. Provider adherence to treatment protocols (fidelity of treatment) and patient outcomes, including satisfaction with care, are also discussed. Supporting evidence for these discussions comes from the committee’s review of the literature, its survey and site visit research, and information gathered from the VA.

AVAILABILITY OF EVIDENCE-BASED PRACTICES FOR MENTAL HEALTH IN THE DEPARTMENT OF VETERANS AFFAIRS

Medical interventions should rest on sound conceptual and empirical foundations and be rigorously designed and evaluated. Evidence-based practice (EBP) is the practice that results from the integration of the best available research evidence with clinical expertise and patient values (IOM, 2001). Over the past decade, the VA has placed a high priority on making EBPs more widely available to veterans who need mental health services. Below, the committee describes the VA’s activities to increase its capacity

to provide evidence-based psychotherapy and then provides a summary of providers' and veterans' perspectives on mental health treatment availability.

See Chapter 4 for details about the EBPs (including psychotherapeutic and pharmacologic treatments) recommended in various VA and Department of Defense (DoD) clinical practice guidelines for the management of veterans seeking VA care for posttraumatic stress disorder (PTSD), depression, substance use disorder, or who exhibit a high-risk for suicide.

Evidence-Based Psychotherapy and Pharmacotherapy

Psychotherapy

For more than a decade, the VA has been executing a multipronged approach to increase the availability of evidence-based treatments for veterans who seek mental health care. Table 11-1 shows the details of the VA's approach to disseminating and implementing evidence-based psychotherapy throughout the health system. Beyond what is outlined in Table 11-1, there are other elements that should be considered when delivering evidence-based treatments. The Chronic Care Model (The MacColl Center, 2017), for example, outlines some of the components needed to effectively implement evidence-based treatments. Studies on effective dissemination strategies show that using multifaceted strategies, as the VA has, is the most effective way to change provider behavior (BootsMiller et al., 2004; Ruzek and Rosen, 2009).

Provider training is a major focus of the VA's EBP initiative and has been key to improving the VA's capacity to provide psychotherapy to veterans. Details about the training program are presented in Chapter 8 in the provider quality section. Some specific VA policies supporting the implementation of evidence-based care include requiring all facilities to have staff trained in evidence-based psychotherapy treatment, designating local EBP coordinators, and instituting new policy standards. Regarding the latter, the VA released the Veterans Health Administration (VHA) Handbook 1160.01: *Uniform Mental Health Services in VA Medical Centers and Clinics* (the *VHA Uniform Mental Health Services Handbook*) (VA, 2015), which set minimum standards for providing mental health services and evidence-based treatments across VA facilities.

Pharmacotherapy

The VA's progress in the use of evidence-based practices includes expanding the implementation of evidence-prescribing practices to ensure that veterans have access to high-quality, evidence-based pharmacological treatments for mental health. In 2013 the VA launched the Psychotropic Drug Safety Initiative (PDSI), a system-wide psychopharmacology quality improvement (QI) program to support high-quality prescribing practices at Veterans Integrated Service Networks (VISNs) and facilities. PDSI provides quarterly scores on 35 prescribing performance metrics, offers tools to identify actionable opportunities for patient care improvement, and supports QI implementation through educational resources, such as a virtual learning collaborative, training, and technical assistance. The VA reports that phase 1 of PDSI (ended in the fourth quarter of fiscal year [FY] 2015) had increased the use of evidence-based pharmacological treatments for veterans with substance use disorders, decreased inappropriate use of benzodiazepines, decreased polypharmacy, and decreased the use of potentially harmful medications in veterans with PTSD. Preliminary results from phase 2 (set to end in the third quarter of FY 2017), which has focused on improving evidence-based prescribing among older veterans, has also led to improvements in care. Fewer older veterans are receiving potentially harmful benzodiazepines and anticholinergic medications.

TABLE 11-1 National Evidence-Based Psychotherapy Dissemination and Implementation Model in the Department of Veterans Affairs

Implementation Level	Focus	Strategies
Policy	National requirements for EBP availability	<ul style="list-style-type: none"> • VHA Comprehensive Mental Health Strategic Plan • VHA Handbook 1160.01: <i>Uniform Mental Health Services in VA Medical Centers and Clinics</i>
Provider	Staff training and support	<ul style="list-style-type: none"> • VHA Mental Health Initiative Operating Plan • Competency-based staff training programs <ul style="list-style-type: none"> ◦ Structured and collaborative consultation ◦ Organized recruitment and selection processes • Longer-term consultation support <ul style="list-style-type: none"> ◦ “Virtual office hours” ◦ Local peer consultation and communities of practice
Local systems	Local clinical infrastructures and buy-in	<ul style="list-style-type: none"> • Local EBP coordinators and PTSD mentors • Adaptations to organization and culture of care, scheduling grid • Demonstrate direct value and impact of EBPs <ul style="list-style-type: none"> ◦ Data on effectiveness, satisfaction/acceptability, service/cost offset ◦ Success stories • External facilitation • VHA Handbook 1160.05: <i>Local Implementation of EBPs for Mental and Behavioral Health Conditions</i>
Patient	Clinical implementation strategies	<ul style="list-style-type: none"> • Patient-informed choice <ul style="list-style-type: none"> ◦ Pretreatment processes • Motivational enhancement • Socialization to treatment • Assessing and enhancing the therapeutic relationship • Case conceptualization and goals-based approach
Accountability	Monitoring and evaluating implementation and impact	<ul style="list-style-type: none"> • Computerized EBP documentation templates • Surveys of local EBP delivery • Performance measure • Online psychotherapy metrics dashboard • EBP training program evaluation <ul style="list-style-type: none"> ◦ Therapist-level and patient-level outcomes

NOTES: EBP = evidence-based psychotherapy (in this table only; elsewhere EBP = evidence-based practice).

SOURCE: Karlin and Cross, 2014.

With the growing epidemic of opioid misuse and opioid use disorder in the United States, including among the nation’s veterans, the VA has deployed the Opioid Safety Initiative (OSI) requirements to all VISNs with the aim of ensuring that opioids are used in a safe, effective, and judicious manner. The implementation of OSI is similar to that of PDSI, described above, including the use of performance measures and educational activities. As part of the OSI, the VA launched the Opioid Overdose Education and Naloxone Distribution program. In addition to OSI, the VA is implementing a new clinical practice guideline to evaluate, treat, and manage patients with chronic pain who are on or being considered for long-term opioid therapy. The *VA/DoD Clinical Practice Guideline for Opioid Therapy for Chronic Pain, Version 3.0—2017* is based on evidence reviewed through December 2016 and replaces the 2010 VA/DoD guideline for opioid therapy (Opioid Therapy Chronic Pain Work Group, 2017).

Provider and Veteran Perspectives on Availability of Care

From the site visit interviews with VA providers, the committee found that across all 21 sites, VA clinicians indicated that they had been trained in and were using a variety of evidence-based treatments for mental health. The principles of the various modalities are used either in individual therapy or in group sessions. Some staff reported that providing time-limited services with an evidence base has helped to keep the patients “flowing” through the system, with the recommended frequency of visits and within the guidelines recommended.

The committee’s survey asks about the availability of a range of VA mental health services from the veterans’ perspective. Among VA users who have mental health need, a majority were very or somewhat satisfied with the availability of general mental health services (62 percent) and with the availability of medication management for mental health (56 percent). On the other hand, fewer VA users reported being very or somewhat satisfied with the availability of specialized mental health services (40 percent), psychotherapy (39 percent), case management (31 percent), emergency services (25 percent), and group therapy (21 percent). These results are presented in more detail in Chapter 6, Table 6-18, under the heading Barriers and Facilitators to Service Use.

DELIVERY OF MENTAL HEALTH CARE IN THE VETERANS HEALTH ADMINISTRATION

Despite the availability of effective treatments, millions of Americans who might benefit from treatment are not seeking treatment or are not receiving adequate treatment. Studies show that gaps in the use of effective treatments exist in both general health care and mental health care and in both the civilian and veteran health systems (Cook and Wiltsey-Stirman, 2015; Farmer et al., 2016; Harpaz-Rotem and Rosenheck, 2011; Watkins et al., 2015). However, research indicates that the mental health treatment gap is smaller in the VA than in the private sector (Watkins et al., 2015). While studies comparing the quality of mental health care received by veteran and by civilian populations are scarce, there are data showing that the VA performs favorably on key measures of mental health quality when compared to private health plans. In an analysis of use data for VA patients and for patients enrolled in private health plans, Watkins et al. (2015) compared veterans who had received a mental health diagnosis (i.e., schizophrenia, bipolar disorder, PTSD, major depression, or substance use disorder) in FY 2007 (N = 836,519) to a comparable population in private plans (N = 545,484) on seven measures related to medication evaluation and management.¹ The gap in providing the indicated care between the VA and private sector was at least 10 percentage points. Veterans with schizophrenia or major depression were more than twice as likely to receive appropriate initial medication treatment, and veterans with depression were more than twice as likely to receive appropriate long-term treatment. Nonetheless, on four of the seven measures, fewer than half of the veterans who were eligible to receive the indicated medication-related treatment received it.

Until recently, there was no systematic method for measuring how widely evidence-based psychotherapy was used throughout the VA; the VA did not have a standard method of collecting data on how many and which patients who had PTSD received cognitive processing therapy (CPT) or prolonged exposure (PE) therapy, for example (IOM, 2014). The VA has reported to this committee that after several years of testing and development, it has begun fully implementing progress note templates in the

¹The measures addressed medication laboratory tests, any laboratory screening tests, antipsychotics, 12-week supply, maintenance treatment with antipsychotics, maintenance treatment with mood stabilizers, antidepressants, 12-week supply, and maintenance treatment with antidepressants.

electronic medical record in order to document and track the system-wide delivery of evidence-based psychotherapy (Rosen et al., 2016; VA, 2017).

The VA's new electronic progress note templates allow clinicians to document individual sessions of specific evidence-based psychotherapies. Prior to this time, the only available data were medical billing codes describing the length of sessions and whether a session was an individual or group format, rather than describing the type of psychotherapy delivered. The new clinical progress templates collect data about patient characteristics, symptoms, treatment setting, the therapy process, the number of sessions, and treatment completion (Karlin and Cross, 2014; Rosen et al., 2016). Used appropriately—provider compliance with data entry is key—these templates are expected to significantly enhance the VA's capacity to systematically evaluate the use of psychotherapy treatment throughout the system of care. Until then, such evaluation relies on the examination of research studies conducted with veteran populations.

Research on the VA's delivery of evidence-based psychotherapy and pharmacotherapy treatments focuses on three aspects of care: treatment initiation, adherence, and completion; patient engagement in treatment; and treatment fidelity. Many of the studies examined the rates of veterans receiving treatment. The actual services delivered were measured against practice standards related to the frequency and length of visits, the medication dosage and supply, follow-up and monitoring, or the length of the treatment course (Cook and Wiltsey-Stirman, 2015; Cook et al., 2014; Cully et al., 2008). In these evaluations, the common treatment standards used were the VA/DoD clinical practice guidelines (refer to Chapter 4), the facilities standards mandated by the *VHA Uniform Mental Health Services Handbook* (VA, 2015), and HEDIS^{®2} quality measures. It can be concluded that care is inadequate if large numbers of veterans do not appear to be treated with an EBP or when the level of treatment received does not meet the practice standards for what is considered a full dose or full course of treatment. Cook and Wiltsey-Stirman (2015) stressed that the majority of studies are descriptive and that there is a need for more rigorous, experimental studies of treatment implementation.

Below, the key findings from the committee review of the literature are summarized and organized by three aspects of care: treatment initiation, adherence, and completion; patient engagement in treatment; and treatment fidelity.

Treatment Initiation, Adherence, and Completion

Millions of Americans experience mental health disorders, but only a subset of these individuals actually receives services. The 2016 National Survey on Drug Use and Health indicates that an estimated 35.2 percent of 10.4 million adults with a serious mental illness (SMI) had not received mental health services in the past. SMI was defined as any mental, behavioral, or emotional disorder—excluding substance use disorders and developmental disorders—that substantially interfered with or limited one or more major life activities. Of the 19.9 million adults needing substance use treatment, less than 11 percent (2.1 million) received specialty treatment (Park-Lee et al., 2017). Harpaz-Rotem and Rosenheck (2011) reported on studies that found that a significant proportion of patients entered treatment but did not receive the minimum number of sessions needed to achieve clinical benefits; an estimated 20 to 57 percent of patients dropped out after the first session of mental health treatment.

Similarly, several studies of the VA found that a large proportion of veterans do not receive any treatment following a diagnosis of PTSD, alcohol or other substance use disorder (SUD), or depression. With respect to EBPs, studies from the early years of the Iraq and Afghanistan conflicts (2001–2005) (Cully et al., 2010; Garfield et al., 2011; Hunt and Rosenheck, 2011; Rosen et al., 2011) as well as more

²HEDIS[®] is registered trademark of the National Committee for Quality Assurance.

current studies (Rosen et al., 2016) consistently show that the implementation of EBPs at the VA is variable and quite low at some sites.

Summarized below are findings from studies the committee reviewed that assess the degree to which patients are receiving evidence-based care as well as factors associated with initiation and retention in treatment.

Posttraumatic Stress Disorder

Spoont et al. (2014) found that 45 percent of veterans did not receive any PTSD treatment (either psychotherapy or pharmacotherapy) within 6 months of a PTSD diagnosis. Another study showed that 29 percent of Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veterans with PTSD received minimally adequate treatment within a year of their diagnosis (Lu et al., 2011). In a relatively small study (N = 137), Harpaz-Rotem et al. (2014) found that 73 percent who screened positive for PTSD or depression initiated care in the year following their mental health assessment. However, only 45 percent of those who initiated care (33 percent of the total sample) received adequate care (attended 12 or more visits within a year of their assessment). Data from VA specialty PTSD clinics in New England showed that only 6 percent of veterans with a new PTSD diagnosis received at least one session of evidence-based psychotherapy within their first 6 months of treatment (Watts et al., 2014). CPT use ranged from 1 to 13 percent, and PE therapy varied from 0 to 3 percent across six sites in the study. Kehle-Forbes et al. (2015) found higher rates of EBT use, but still only half of the veterans who were referred for PE therapy or CPT in the study sample completed the treatment.

Among veterans who do receive treatment for PTSD, many do not receive guideline-concordant care. In a large study (N = 356,958) of veterans with PTSD receiving medication from V providers, Abrams et al. (2013) found that just over 65 percent of veterans were prescribed selective serotonin reuptake inhibitors or serotonin norepinephrine reuptake inhibitors, and 37 percent were prescribed benzodiazepines, which are not guideline-recommended treatments for PTSD and which can interfere with EBPs for PTSD. Similarly, Jain et al. (2012) found that 14 percent of veterans with a recent PTSD diagnosis and without a clear comorbid psychiatric diagnosis were prescribed benzodiazepines.

Alexander et al. (2015) also found evidence of treatment patterns that were not consistent with the VA guidelines for PTSD. Among the 12,844 VA patients who were prescribed prazosin for PTSD in 2010, less than 40 percent were still taking the drug 1 year later, and fewer than 20 percent received the minimum recommended dosage according to VA guidelines (although the reasons for the discontinuation were not clear). Looking specifically at adherence to treatment and the relapse of veterans discharged from an inpatient PTSD program who were prescribed antidepressants (N = 82), Lockwood et al. (2009) found overall adherence to be 34 percent, with no significant association between adherence and rehospitalization. Notably, given the fact that there were only 82 subjects in the study, this result might be based on a low-power analysis.

Substance Use Disorder

Similar shortfalls have been reported for SUD treatment. Among veterans aged 21 to 34 in the general population, Golub et al. (2013) found that only 10 percent of non-institutionalized veterans who screened positive for SUD had received treatment in the previous year, and 16 percent of veterans overall had an unmet need for SUD treatment. Hawkins et al. (2010) also found patterns of care not consistent with VA guidelines in a cross-sectional national sample of VA outpatients randomly selected for standardized medical record review (N = 12,092). According to VA guidelines, all veterans who screen positive for

alcohol misuse are supposed to receive a brief intervention, but only 32 percent of men who screened positive for alcohol misuse (AUDIT-C ≥ 5) received advice or feedback (the more inclusive measure of brief intervention), and only 12 percent received advice *and* feedback (the performance measure for brief intervention for FY 2008). About half of the veterans (49 percent) who screened positive for alcohol misuse received either a brief intervention or a referral to treatment, although only 13 percent of positive-screening veterans actually scheduled appointments. These findings were similar to those of Grossbard et al. (2013), who found that among 4,725 OEF/OIF VA outpatients with alcohol screening (2006–2010), 61 percent of veterans with positive alcohol misuse screens received either a referral or a brief intervention. Watkins and Pincus (2011) reported that 71 percent of veterans had documentation of a brief intervention, current specialty care, or a completed referral to specialty mental health care during FY 2007.

Among veterans with documented alcohol dependence, pharmacotherapy was offered or contraindicated for only 16.4 percent within 30 days of a new treatment episode, and 21.5 percent received psychotherapy with documentation of relapse prevention therapy (Watkins and Pincus, 2011). However, Del Re et al. (2013) suggest that VA data may be underestimating the rates of pharmacotherapy for alcohol use disorder by as much as 40 percent because topiramate (which is not Food and Drug Administration approved for alcohol dependence) is commonly used off label in the VA to treat alcohol dependence but is not captured in the monitoring data.

An investigation into opioid addiction treatment and opioid prescribing practices also revealed patterns not consistent with VA guidelines. Watkins and Pincus (2011) found that only 25 percent of veterans with opioid addiction had documentation that maintenance therapy had been offered or contraindicated within 30 days of new treatment in FY 2007. The VA Clinical Practice Guidelines for SUD (VA and DoD, 2009) state that “addiction-focused pharmacotherapy should be considered, available, and offered if indicated for all patients with opioid dependence and/or alcohol dependence.” Another study of 4,270 veterans who were 18 to 30 years of age and treated at VA Palo Alto Health Care System found that only 31 percent of veterans receiving prescription opioids underwent drug testing while on the drugs (Wu et al., 2010); however, the guidelines recommend random testing of all recipients (VA, 2010).

Major Depression

Using the HEDIS[®] quality measures, Pfeiffer et al. (2011) found patterns of inadequate care for veterans with major depressive disorder. Among a large sample of veterans discharged from a psychiatric inpatient stay with a major depressive disorder diagnosis ($N = 45,587$), less than 40 percent completed a follow-up visit within 7 days of discharge and just over 75 percent did within 30 days. Less than 60 percent of the veterans received adequate antidepressant coverage following discharge (at least 72 of 90 days), and less than 13 percent received adequate psychotherapy (at least 8 encounters). In another look at adherence, Zivin et al. (2009) found antidepressant medication adherence to be low (<0.8 medication possession ratio³) for about half of veterans 3 months following discharge from an inpatient psychiatric stay. At 6 months following discharge, 60 percent of veterans had low adherence. The Government Accountability Office (GAO, 2014) (2014) also found treatment patterns that were not consistent with VA guidelines for major depressive disorder. In a review of 30 veterans’ medical records only 6 (20 percent) were assessed with the Patient Health Questionnaire-9 item (PHQ-9) at the start of antidepressant treatment, and only 4 (13 percent) were reassessed 4 to 6 weeks following treatment

³Medication possession ratio is defined as the total number of days’ supply received divided by the number of days’ supply needed for continuous use.

initiation. Only 18 veterans (60 percent) received a PHQ-9 assessment at any encounter during their course of treatment. The GAO concluded that the VA does not have mechanisms in place that fully assess the extent to which care is consistent with the guideline, and it recommended that the VA “implement processes to review data on veterans with MDD [major depressive disorder] prescribed antidepressants to evaluate the level of risk of any deviations from recommended care and remedy those that could impede veterans’ recovery” (GAO, 2014, p. 37).

Factors Associated with Receiving Any, Adequate, or Complete Treatment

Several studies have found older age (>30 yr) to be associated with staying in treatment for PTSD, SUD, depression, or some combination (Erbes et al., 2009; Kehle-Forbes et al., 2015; Tate et al., 2011), although being over 65 was also associated with less than adequate care (Pfeiffer et al., 2011). Erbes et al. (2009) showed that OEF/OIF veterans had significantly lower rates of session attendance and higher rates of treatment dropout than (older) Vietnam veterans, even after controlling for differences in the treatment presentation. Other factors that have been found to predict treatment initiation, retention, or greater concordance with guidelines include being white, being female, living less than 30 miles from a facility, having a recent major health event, having three or more medical comorbidities, having greater PTSD symptom severity, having depressive symptoms, having more severe alcohol use disorder comorbid with traumatic brain injury and PTSD, and having low social support (Grossbard et al., 2013; Harpaz-Rotem et al., 2014; Morgan et al., 2012; Pfeiffer et al., 2011; Zivin et al., 2009).

Individual Perceptions and Treatment-Seeking

As the committee had found in its analysis of the veteran survey data presented in Chapter 6, individual perceptions of the VA and mental health care in general may determine whether an individual veteran seeks the mental health care he or she may need. While in some cases perceptions do not reflect the structural or policy realities at the VA, to a veteran in need of care, his or her perceptions are major factors that drive the decision to seek care or not. It is important to note, however, that addressing common perceptions requires a different approach than addressing other barriers to care, particularly when the perception does not align with the reality. For example, if the common perception is that a local VA health facility is not capable of providing services to women veterans with military sexual trauma, but that facility has recently established a women’s clinic, it is critical not only to address the barrier by establishing the clinic, but also to address the perception of gaps in care separately.

The committee reviewed several studies in the literature that examined how personal perceptions of mental health care affect mental health treatment behavior among veterans. Not surprisingly, veterans who perceive a need for mental health care are more likely to seek treatment. The committee’s survey of veterans found that among OEF/OIF/Operation New Dawn veterans who perceived that they needed mental health care and who screened positive for a mental health condition, 55 percent had sought mental health care services (see Chapter 6). Similarly, veterans with positive perceptions of psychotherapy and antidepressants are more likely to seek those treatments than veterans who do not view them positively, although the association is modest (Spoont et al., 2014). A prospective study of veterans with PTSD or depressive symptoms found that veterans who perceived barriers, including access-related barriers (“I can’t take time off work”; “It is difficult to schedule an appointment”), stigma-related barriers (“It would harm my career”), and trust-related barriers (“My visit would not remain confidential”) were no less likely to actually receive care than veterans who did not report these barriers (Hoerster et al., 2012). Similarly, Harpaz-Rotem et al. (2014) found that perceived barriers to care and negative beliefs about

mental health care (“I don’t trust mental health professionals”; “Psychotherapy is not effective for most people”; and “Mental health care does not work”) did not affect mental health care retention, although the sample was limited to veterans who had at least received their initial mental health assessment at the VA.

Other research looks at the relationship between reported barriers and treatment-seeking behavior. In a qualitative study of 143 veterans, Stecker et al. (2013) looked at the reasons why OEF/OIF veterans who screened positive for PTSD did not initiate PTSD treatment. Participants cited four major reasons for not seeking treatment: (1) concerns about treatment (for example, “I don’t want medication”) (40 percent); (2) emotional readiness (for example, “It’s too hard to talk to someone”) (35 percent); (3) stigma (for example, “I will get into trouble if I go to treatment”) (16 percent); and (4) logistical issues (for example, “I don’t have time”) (8 percent). Ouimette et al. (2011) also looked at this issue and found that discomfort with seeking help and concerns about social consequences were the primary reasons veterans with recent PTSD diagnoses did not seek care. Concerns about the skill and sensitivity of VA staff, logistical barriers, and concerns about fitting in were also reported, but were less concerning on average. Notably, being an OEF/OIF veteran was associated with being more likely to have a perception of not fitting in. Individuals with more severe PTSD symptoms, particularly those with avoidance symptoms, reported greater barriers to care than those with less severe symptoms.

Drapalski et al. (2008) studied perceived barriers to mental health treatment among veterans with schizophrenia, bipolar disorder, and major depression. Sixty-seven percent of the study’s participants (N = 136) reported having experienced at least one barrier to receiving mental health care. Personal factors (for example, personal crisis, inability to explain needs, not knowing how to make an appointment, and forgetting an appointment) were the most commonly cited barriers (56 percent of respondents). Time constraints (24 percent) and transportation (24 percent) were the second-most reported barriers to mental health care. Institutional constraints (such as “it took too long to get care” or “was not given an appointment”) were the next most reported barriers to mental health care (21 percent). In general, participants with more severe psychiatric symptoms reported more barriers (Drapalski et al., 2008).

Patient Engagement and Retention in Treatment

Many factors at the patient, provider, and system levels determine whether people who are experiencing mental health problems get the care they need. Engaging people in mental treatment can be challenging because of the nature of the condition itself and because of health, social, and economic consequences that act as barriers to care (Collins et al., 2010; Harpaz-Rotem and Rosenheck, 2011). In the veteran population, military culture, personal experiences in the military, and perceptions about the VA system may also play a large role in decisions whether to seek treatment and remain engaged.

In Chapter 10, a description of VA patient-centered mental health care includes evolving VA strategies to increase engagement and retention in care, such as expanding the peer support program and launching a new online decision-support tool for PTSD treatments (VA, 2017).⁴ In response to the committee’s inquiry about how retention in treatment has changed over the past few years (VA, 2017), the VA reported that concurrent with its heavy investment in hiring additional mental health providers and training providers in evidence-based psychotherapy over the last 5 years, there has been an increase in the average number of mental health visits completed by veterans within a given 12-month period (see Figure 11-1).

In a look at various research studies, Harpaz-Rotem and Rosenheck (2011) found that among OEF/OIF and Vietnam veterans with a new PTSD diagnosis, the retention and number of mental health

⁴See www.ptsd.va.gov/decisionaid.

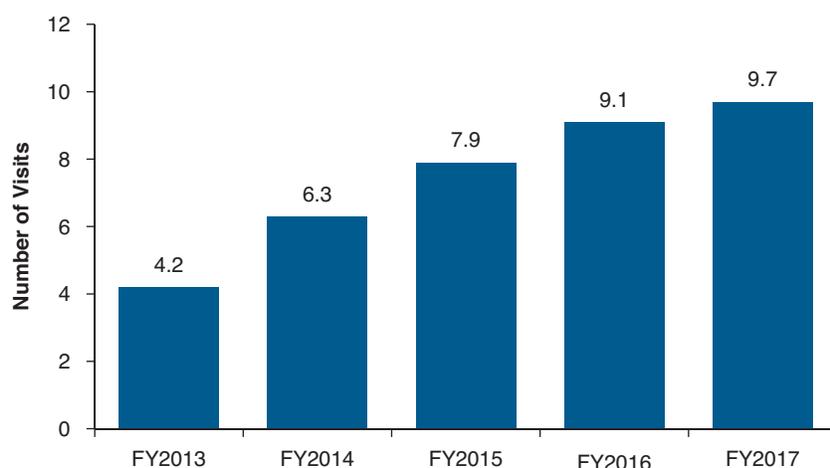


FIGURE 11-1 Average number of veteran mental health visits for fiscal years 2013–2017.
SOURCE: VA, 2017.

visits were lower among OEF/OIF veterans. However, this finding was primarily a function of age and comorbidity rather than of service era (Harpaz-Rotem and Rosenheck, 2011). In another study, OEF/OIF veterans with more severe PTSD symptoms (specifically, re-experiencing symptoms) and greater support from their military unit were found to be more likely to initiate care following their initial mental health assessment, and those with numbing symptoms were found to be more likely to stick with treatment. Personal stigma and positive opinions of care were not associated with either initiation or retention (Harpaz-Rotem et al., 2014).

Tate et al. (2011) compared the predictors of retention among veterans with SUD and co-occurring depression participating in one of two treatment interventions. Participants were assigned to either a cognitive behavioral therapy-based treatment or a 12-step program. Both interventions were 24 weeks, and retention did not differ between the two. Similar to the Harpaz-Rotem and Rosenheck study cited above, being older and Caucasian was found to be predictive of retention. Marital status, education, neuropsychological functioning, financial stress, chronic health problems, treatment motivation, and psychiatric severity were not predictive of retention. In a study of retention in opioid agonist therapy, the dosage was the greatest predictor of retention, with those receiving 59 millifeMA or more of methadone per day more likely to stay in therapy. And among those receiving that dosage, higher satisfaction was a predictor of retention. Ethnicity and employment status were not predictors of retention (Villafranca et al., 2006).

Efforts to improve engagement can be effective. Smelson et al. (2012) evaluated an intervention designed to improve engagement among veterans with co-occurring mental disorders (schizophrenia or bipolar) and SUD. Participants were assigned to either a time-limited care (TLC) coordination intervention (which provides the same case manager across inpatient and outpatient settings who delivers brief integrated mental health and substance abuse care) or to a matched attention (MA) health education control intervention. Participants assigned to the TLC intervention were more engaged—69 percent attended outpatient appointments within 14 days of discharge versus only 33 percent of veterans assigned to the MA control. TLC participants were twice as likely as MA participants to be engaged with outpatient services at the end of the intervention period (44 versus 22 percent; $p < 0.01$).

Similarly, Schaefer et al. (2011) looked at how continuity-of-care efforts at the VA result in differences in engagement among veterans in inpatient and outpatient SUD treatment programs. Overall, veterans who participated in programs that provided more continuity of care services stayed in treatment longer. Interestingly, when continuity of care was lacking, veterans with moderate-to-low psychiatric severity were less engaged in treatment than high-severity veterans. The moderate-to-low psychiatric severity veterans were, however, more engaged than high psychiatric severity veterans when the continuity of care services was high. This suggests that veterans with moderate to low psychiatric severity were more responsive to engagement efforts than veterans with high psychiatric severity. Veterans with more severe psychiatric problems at entry and a history of SUD or psychiatric visits stayed in care longer, and engagement was the strongest predictor of abstinence for them. Lash et al. (2007) also found that continuing care efforts were effective at improving patient engagement and abstinence among veterans with SUD.

Treatment Alliance

The presence of treatment alliance, which includes a patient–therapist agreement on the tasks and goals of treatment as well as the bond between patient and therapist, is a well-documented contributor to the effectiveness of psychotherapeutic treatment (Fluckiger et al., 2012). Multiple meta-analyses have found a modest ($r = 0.275$) but robust effect of therapeutic alliance on psychotherapy outcomes regardless of the theoretical orientation or the treatment technique (Horvath et al., 2011). Although its value in psychopharmacologic treatment is less studied, existing evidence indicates that treatment alliance is also a significant factor in the effectiveness of that approach to treating for mental health conditions (Zilcha-Mano et al., 2015). In addition to the beneficial effects for the patient of experiencing a supportive treatment relationship, treatment alliance can improve outcomes by increasing patient engagement and retention in treatment and enhancing medication adherence. This may be especially true for treatments that are effective but that cause increased distress, such as prolonged exposure therapy, where supportive engagement with a therapist can moderate this distress and help retain patients in treatment.

Survey results (see Chapter 8, Tables 8-4 through 8-7) relating to patients' satisfaction with their relationships with treatment providers as well as findings from the site visits suggest that VA users generally experience positive treatment relationships with their providers. However, it was apparent from some site visit data that factors external to the treatment relationship (for example, frustrations with parking, limitations on the frequency of treatment sessions, frequent provider changes) may be impinging on treatment alliance and thus negatively affecting the outcomes of care.

Committee's Research about Perceptions of Treatment Engagement

Mental health clinicians interviewed during multiple site visits expressed concerns about the effect that system barriers (such as long waits for treatment appointments) have on treatment retention and the ability to deliver certain psychotherapeutic interventions with fidelity, that is, according to the schedule indicated by validated treatment protocols (the next section further examines the issue of treatment fidelity). Providers expressed concern about veterans not completing treatment, and staff at some facilities were beginning to consider what they might do to improve retention rates, such as anticipating factors that would contribute to dropout and offering more motivational interviewing in advance.

In some site visit interviews, veterans spoke about their experiences with various treatment interventions, particularly PE therapy and CPT for PTSD, both of which are evidenced-based psychotherapies. By design, both PE therapy and CPT are intense because they require the patient to relive the traumatic

event repeatedly until the memory of the event ceases to carry a negative emotional valence. Several veterans who had attempted a course of either PE therapy or CPT reported feeling overwhelmed after their sessions, and these feelings led them to terminate treatment prematurely. For example, a veteran who was treated for PTSD at the VA described his experience as feeling like an unfinished surgical procedure:

One of them [therapist] goes straight for the PTSD. You start getting all these emotions and feelings and stuff about what's going on in the past. Then—the next thing you know—the hour's up—time to go home. They won't close you back up. Then you go out the rest of your day with anxiety and stuff like that and dealing with your own thing. [Palo Alto, California]

Further exploration of the interview data suggests that the access issues—where patients may be seen only every 30 days (or longer) for psychotherapy—may seriously compromise fidelity to the PE and CPT models, for which treatments should be scheduled a week or less apart. One veteran described how agonizing he imagined it would be to continue with PE sessions at 30-day intervals.

Certainly not every veteran interviewed reported such lag times between appointments, but the high dropout rates suggest that long follow-up intervals may be contributing to the problem.

Treatment Fidelity

Fidelity of treatment is the delivery of treatments according to validated treatment protocols. Studies show that variability exists in VA provider adherence to EBPs for mental health (Finley et al., 2015; Rosen et al., 2016). For example, in a survey of providers ($n = 128$) within VA PTSD clinical teams, 68.8 percent ($n = 88$) reported that they typically adhered “very often” to the PE manual, and 52.3 percent ($n = 67$) reported adhering very often to the CPT manual (Finley et al., 2015). Research findings indicate that providers who believe that PE and CPT are effective, especially relative to other treatments, are more likely to use these EBPs and adhere to the treatment manuals. A supportive work environment is another factor associated with whether providers use an EBP (Finley et al., 2015; Rosen et al., 2016).

In the site visit interviews, VA clinical staff reported implementing evidence-based treatments “with flexibility” in an effort to retain veterans in therapy. For example, a VA clinician explained that he will “back off” of trauma work:

I've had people come in and say, “That's it—I can't do this anymore.” Usually I just say, “How about we sit down and talk about something else for a while?” I haven't had too many people that had stopped treatment I felt should still be in treatment. [Altoona, Pennsylvania]

Another clinician reported that he will provide extra support to keep veterans in treatment:

[When] things seem worse before they're better, they [veterans] think, “Well, therapy's not working for me,” and they terminate treatment . . . and so we try to figure out, “Okay, what can we do in the interim?” [San Diego, California]

Some VA programs had standardized alternative treatments for veterans with PTSD for whom CPT or PE seemed inappropriate at the time of intake. One clinic in Tampa had two separate tracks of PTSD treatment: the first track provided PE or CPT in either individual or group format, and the other focused on anger management and motivational enhancement. Patients in the second track had “psychosis or impulse control problems” or were not motivated: “We have a lot of patients that may not be ready, but everyone around them is like, ‘You need to provide care to them.’” Similarly, a program in San Diego, California, reported that one of the two providers who treated PTSD was

. . . doing more skill-based stabilization, more support-oriented work, until they're [veterans] ready for an EBT . . . but we're not terribly rigid about it. When we step out of it [an EBT], it's thoughtfully.

Overall, many VA clinicians reported that they needed to alter evidence-based therapies or risk the patient dropping out. Across the 21 sites, interview data indicate a good faith effort to implement the evidence-based treatments that are specified in *VA Uniform Mental Health Services in VA Medical Centers and Clinics* (VA, 2015). However, as mentioned earlier with respect to PE and CPT, scheduling challenges can compromise fidelity to the therapy model and contribute to premature dropout:

When they got the first appointment, it was OK. Then when they go to reschedule, "Well, I'll see you in 60 days." To me, that's a huge gap because you lose a lot of the veterans in that process. [VA clinician – East Orange, New Jersey]

I'm at a point of where I need to be seeing people once a week. I might see them every 3 weeks for these evidence-based treatments. That's not great. [VA clinician – Charleston, South Carolina]

With the VA to be honest, because they can't see me as often as I need to be seen or give me more individualized care, I feel it's better to go outside. [Veteran – San Diego, California]

VA clinicians often create variations on the EBTs in an effort to maintain patient engagement.

In other research, Cook et al. (2014) conducted interviews with providers at 38 VA PTSD residential programs and found similar evidence of treatment adaptations to CPT and PE, including tailoring the language or materials, changing the length of the protocols, and integrating with other psychotherapeutic interventions, most of whose effectiveness has not been evaluated.

Little information is available on the flexibility of EBPs, such as CPT or PE, or on how they can be adapted and yet remain effective (Rosen et al., 2016). Preliminary assessments of the effectiveness of adaptations in treatment protocols include studies by Chard et al. (2010), Galovski et al. (2012), Nacasch et al. (2015), and Smith et al. (2015). In addition, more research is needed to assess the effectiveness of different strategies that can help improve fidelity and clinician effectiveness (Rosen et al., 2016). For example, one study found that clinics were more likely to use CPT or PE if clinicians reported previous experience with the treatments, had sustained contact with treatment implementation facilitators/consultants, and received customized training (Watts et al., 2014).

Alterations in treatment protocols based on treatment response, patient preference, or the need to address comorbid conditions are consistent with evidence-based practice. Evidence on psychotherapies that are effective for PTSD indicates that the therapy may be customized as long as the five core components (narration, cognitive restructuring, in vivo exposure, relaxation, and psychoeducation) are applied (Hoge, 2011). However, reducing the frequency of sessions for PTSD treatment may diminish the effectiveness of treatment. Gutner et al. (2016) found that, for women receiving either CPT or PE, less frequent treatment sessions were associated with significantly smaller reduction in PTSD symptoms.

In another study, Lapham et al. (2012) found that the dissemination of a clinical reminder along with a brief intervention for alcohol misuse was associated with increased adoption of brief intervention for veterans who screened positive for alcohol misuse. The prevalence of the brief intervention increased from 42 to 58 percent, indicating that clinical reminders may work to increase the use of interventions.

Patient Outcomes

Ongoing monitoring of patient care is essential to managing treatment delivery and assessing the effectiveness of care. Measuring the results of treatment that patients experience—patient health outcomes—is vital to the advancement of health care quality (IOM, 2001). As mentioned in Chapter 15, a

critical gap in quality measurement is mental health outcome data. As mentioned above, the VA recently started collecting data on the delivery of evidence-based psychotherapy using electronic clinical progress templates incorporated into veterans' health records (Karlin and Cross, 2014; Rosen et al., 2016; VA, 2017). In the clinical progress templates, providers can document a patient's symptom changes over the course of treatment. These data are useful for studies examining the impact of treatment on health status and other patient outcomes.

In addition, the VA has a goal for 2016–2018 to complete the development of and to release phase I of the Mental Health Quality and Clinical Outcomes Reporting System, a comprehensive tracking system that will allow providers to track the flow of their patients through mental health care and monitor their outcomes with standardized patient-reported outcome measures (VA, 2016).

Provider Perspectives on Assessing Outcomes

Clinicians told the site visit team about the methods they use to track how their patients do in individual therapy. Generally this consists of administering a self-report scale to the patient at various points during his or her treatment in order to track progress. The most common instruments mentioned by administrators and providers were the PTSD Checklist–Military (PCL-M) and the PHQ-9. However, most programs that asked clinicians to track clinical outcomes were unable to aggregate the outcome data.

More generally, providers gauged the success of individual treatments by qualitatively assessing both the severity of symptoms and the social and occupational functioning of patients. For example, a clinician from East Orange, New Jersey, said that she knows that someone is getting better when, “[t]heir relationships are more stable and more fulfilling—more connected. I know that’s not necessarily quantifiable.” Clinicians reported that they also look for a decrease in symptoms.

I measure by how they’re doing. Are they able to go back to school? Are they able to hold down a job? Do they report a decrease in their hallucinations, a decrease in their paranoia? How [are] they relating to me? [Jesse Brown—Chicago, Illinois]

The committee notes that the qualitative assessments of patient improvements noted by clinicians are not systematic or documented in a uniform way.

Positive Outcomes Reported by Veterans

Veterans who had positive treatment experiences described “getting better” in ways that mirrored their therapists’ assessments. First, psychotherapy helped them learn to identify triggers and proactively manage symptoms. One veteran in Charleston, South Carolina, gave an extended metaphor that described how he identified his triggers: “If I’m going down a road, I used to hit a pothole and I would be stuck in it. Now I can see it coming. I can steer around it, or if I do go down into it, I can figure out how to get out a lot faster with different coping skills.” Another veteran in El Paso, Texas, explained being able to identify his flashbacks to attenuate their impact: “The very few times that I do have flashbacks, I can talk myself out of them because I realize what’s going on. The nightmares—I can wake up and calm myself down.” Another gave a specific example of a trigger and how therapy helped change his reaction: “Helicopters for me are big triggers. They used to fly out by where I lived. They still do now, but I know I am not in Iraq when a helicopter flies over. It’s a big change.” [Biloxi, Mississippi]

Second, veterans felt that their psychotherapy assisted them in engaging in fuller social participation; that is, they were able to leave the house and tolerate public spaces. Being less isolated in turn

permitted them to become more involved with their children. For example, a veteran explained that he knew he was getting better because

I'm more of a benefit toward my daughter than I was before. I'm trying to be a daddy and take her to the park and take her swimming instead of hiding from the world. [Cleveland, Ohio]

A second veteran at a different site echoed that experience:

You're able to go in a public place with a group of people . . . you're able to spend time with your kids. . . . Those are the good days. A lot of the time, I'd rather be in bed 16, 17 hours a day in a dark house. If I'm able to leave my house, that's a better day. [Palo Alto, California]

Veterans said that coping with their symptoms—particularly symptoms of PTSD—was an ongoing task. Said one veteran

Like past trauma events, addiction—those types of things—they don't go away. It's in your brain. It's something that has to be continually worked on. [Palo Alto, California]

Another veteran explained,

At the end of that [therapy] I told myself, "Oh, you're recovered." Which is not the case. I have gone back . . . to address other PTSD symptoms that weren't addressed in the very first round of treatment. [Charleston, South Carolina]

These findings suggest that veterans who received timely treatment through a modality they were able to tolerate reported improvements in functioning and a reduction in avoidance symptoms. Psychotherapy taught veterans how to identify and manage the symptoms of PTSD, depression, and anxiety. At the same time, veterans felt that healing was an ongoing process that might require additional treatment.

Positive outcomes reported in site visit interviews are echoed in our survey results in which 63 percent of survey respondents who used VA mental services indicated that their VA mental health providers helped them either some or a lot, and 65 percent reported that they found the effect of care on their quality of life at least a little helpful. Additional details regarding veteran perspectives on outcomes of care are reported in Chapter 10, Table 10-1.

SUMMARY

Using information from the committee's site visits and literature research, this chapter examined the availability of evidence-based practices in the VA system, the quality of mental health providers, and the provision of mental health care to veterans. A summary of the committee's findings on this topic is outlined below.

- Evidence-based mental health services are available to veterans and are mostly concordant with policy mandates.
- The VA uses systematic and tested dissemination strategies to increase provider knowledge and the use of EBPs in the treatment of veteran mental health problems throughout the health system.
- Despite their availability, the implementation of psychotherapies and their fidelity to EBPs, especially for PTSD, is low; many veterans diagnosed with PTSD, depression, and SUD do not receive the recommended treatments.

- Comparative data show that the VA outperforms the private sector on seven process-based quality measures assessing medication treatment for mental health disorders, suggesting that the VA health system provides better care in these areas than does the private sector.
- Nonetheless, large percentages of veterans are not getting care as set forth in clinical standards for dosage, frequency, and follow-up.
- Based on site visits and the research literature, the committee concluded that system issues, such as lag times between appointments that interfere with treatment fidelity (for example, PE and CPT), and patient factors, such as patient preferences for the treatment type, engagement, and retention in treatment, influence the delivery of EBPs.
- Fidelity to EBPs is often lacking; for example, appointments are spaced too far apart, some veterans do not feel ready for EBPs, and some drop out before completing treatment.
- Veterans often reported during the site visits that alternatives to EBPs were not readily available or known to them.
- Some veterans believed that treatment was provided in a “cookbook” fashion with inadequate individualized care.
- Clinicians reported using assessment instruments (for example, the PCL-M and the PHQ for depression) to monitor individual health status, but systematic clinical outcomes data are not collected for many mental health conditions, and data on functional outcomes are not systematically collected from veterans at all.
- The VA recently implemented a clinical progress template in the medical record to advance efforts to systematically assess treatment delivery, treatment fidelity, and patient outcomes.

REFERENCES

- Abrams, T. E., B. C. Lund, N. C. Bernardy, and M. J. Friedman. 2013. Aligning clinical practice to PTSD treatment guidelines: Medication prescribing by provider type. *Psychiatric Services* 64(2):142–148.
- Alexander, B., B. C. Lund, N. C. Bernardy, M. L. Christopher, and M. J. Friedman. 2015. Early discontinuation and suboptimal dosing of prazosin: A potential missed opportunity for veterans with posttraumatic stress disorder. *Journal of Clinical Psychiatry* 76(5):e639–e644.
- BootsMiller, B. J., J. W. Yankey, S. D. Flach, M. M. Ward, T. E. Vaughn, K. F. Welke, and B. N. Doebbeling. 2004. Classifying the effectiveness of Veterans Affairs guideline implementation approaches. *American Journal of Medical Quality* 19(6):248–254.
- Chard, K. M., J. A. Schumm, G. P. Owens, and S. M. Cottingham. 2010. A comparison of OEF and OIF veterans and Vietnam veterans receiving cognitive processing therapy. *Journal of Trauma Stress* 23(1):25–32.
- Collins, C., D. L. Hewson, R. Munger, and T. Wade. 2010. *Evolving models of behavioral health integration in primary care*. New York: Milbank Memorial Fund.
- Cook, J. M., and S. Wiltsey-Stirman. 2015. Implementation of evidence-based treatment for PTSD. *PTSD Research Quarterly* 26(4):1–3. <https://www.ptsd.va.gov/professional/newsletters/research-quarterly/V26N4.pdf> (accessed October 7, 2017).
- Cook, J. M., S. Dinnen, R. Thompson, V. Simiola, and P. P. Schnurr. 2014. Changes in implementation of two evidence-based psychotherapies for PTSD in VA residential treatment programs: A national investigation. *Journal of Traumatic Stress* 27(2):137–143.
- Cully, J. A., M. Zimmer, M. M. Khan, and L. A. Petersen. 2008. Quality of depression care and its impact on health service use and mortality among veterans. *Psychiatric Services* 59(12):1399–1405.
- Cully, J. A., J. P. Jameson, L. L. Phillips, M. E. Kunik, and J. C. Fortney. 2010. Use of psychotherapy by rural and urban veterans. *Journal of Rural Health* 26(3):225–233.
- Del Re, A. C., A. J. Gordon, A. Lembke, and A. H. Harris. 2013. Prescription of topiramate to treat alcohol use disorders in the Veterans Health Administration. *Addict Science & Clinical Practice* 8(1):12.
- Drapalski, A. L., J. Milford, R. W. Goldberg, C. H. Brown, and L. B. Dixon. 2008. Perceived barriers to medical care and mental health care among veterans with serious mental illness. *Psychiatric Services* 59(8):921–924.

- Erbes, C. R., K. T. Curry, and J. Leskela. 2009. Treatment presentation and adherence of Iraq/Afghanistan era veterans in outpatient care for posttraumatic stress disorder. *Psychological Services* 6(3):175–183.
- Farmer, M. M., L. V. Rubenstein, C. D. Sherbourne, A. Huynh, K. Chu, C. A. Lam, J. J. Fickel, M. L. Lee, M. E. Metzger, L. Verchinina, E. P. Post, and E. F. Chaney. 2016. Depression quality of care: Measuring quality over time using VA electronic medical record data. *Journal of General Internal Medicine* 31(Suppl 1):36–45.
- Finley, E. P., H. A. Garcia, N. S. Ketchum, D. D. McGeary, C. A. McGeary, S. W. Stirman, and A. L. Peterson. 2015. Utilization of evidence-based psychotherapies in Veterans Affairs posttraumatic stress disorder outpatient clinics. *Psychological Services* 12(1):73–82.
- Fluckiger, C., A. C. Del Re, B. E. Wampold, D. Symonds, and A. O. Horvath. 2012. How central is the alliance in psychotherapy? A multilevel longitudinal meta-analysis. *Journal of Counseling Psychology* 59(1):10–17.
- Galovski, T. E., L. M. Blain, J. M. Mott, L. Elwood, and T. Houle. 2012. Manualized therapy for PTSD: Flexing the structure of cognitive processing therapy. *Journal of Consulting and Clinical Psychology* 80(6):968–981.
- GAO (Government Accountability Office). 2014. *VA health care: Improvements needed in monitoring antidepressant use for major depressive disorder and in increasing accuracy of suicide data*. Washington, DC: Government Accountability Office.
- Garfield, L. D., J. F. Scherrer, T. Chrusciel, D. Nurutdinova, P. J. Lustman, Q. Fu, and T. E. Burroughs. 2011. Factors associated with receipt of adequate antidepressant pharmacotherapy by VA patients with recurrent depression. *Psychiatric Services* 62(4):381–388.
- Golub, A., P. Vazan, A. S. Bennett, and H. J. Liberty. 2013. Unmet need for treatment of substance use disorders and serious psychological distress among veterans: A nationwide analysis using the NSDUH. *Military Medicine* 178(1):107–114.
- Grossbard, J. R., E. J. Hawkins, G. T. Lapham, E. C. Williams, A. D. Rubinsky, T. L. Simpson, K. H. Seal, D. R. Kivlahan, and K. A. Bradley. 2013. Follow-up care for alcohol misuse among OEF/OIF veterans with and without alcohol use disorders and posttraumatic stress disorder. *Journal of Substance Abuse Treatment* 45(5):409–415.
- Gutner, C. A., M. K. Suvak, D. M. Sloan, and P. A. Resick. 2016. Does timing matter? Examining the impact of session timing on outcome. *Journal of Consulting and Clinical Psychology* 84(12):1108–1115.
- Harpaz-Rotem, I., and R. A. Rosenheck. 2011. Serving those who served: Retention of newly returning veterans from Iraq and Afghanistan in mental health treatment. *Psychiatric Services* 62(1):22–27.
- Harpaz-Rotem, I., R. A. Rosenheck, R. H. Pietrzak, and S. M. Southwick. 2014. Determinants of prospective engagement in mental health treatment among symptomatic Iraq/Afghanistan veterans. *Journal of Nervous and Mental Disease* 202(2):97–104.
- Hawkins, E. J., G. T. Lapham, D. R. Kivlahan, and K. A. Bradley. 2010. Recognition and management of alcohol misuse in OEF/OIF and other veterans in the VA: A cross-sectional study. *Drug & Alcohol Dependence* 109(1–3):147–153.
- Hoerster, K. D., C. A. Malte, Z. E. Imel, Z. Ahmad, S. C. Hunt, and M. Jakupcak. 2012. Association of perceived barriers with prospective use of VA mental health care among Iraq and Afghanistan veterans. *Psychiatric Services* 63(4):380–382.
- Hoge, C. W. 2011. Interventions for war-related posttraumatic stress disorder: Meeting veterans where they are. *JAMA* 306(5):549–551.
- Horvath, A. O., A. C. Del Re, C. Fluckiger, and D. Symonds. 2011. Alliance in individual psychotherapy. *Psychotherapy (Chicago)* 48(1):9–16.
- Hunt, M. G., and R. A. Rosenheck. 2011. Psychotherapy in mental health clinics of the Department of Veterans Affairs. *Journal of Clinical Psychology* 67(6):561–573.
- IOM (Institute of Medicine). 2001. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- Jain, S., M. A. Greenbaum, and C. Rosen. 2012. Concordance between psychotropic prescribing for veterans with PTSD and clinical practice guidelines. *Psychiatric Services* 63(2):154–160.
- Karlin, B. E., and G. Cross. 2014. From the laboratory to the therapy room: National dissemination and implementation of evidence-based psychotherapies in the U.S. Department of Veterans Affairs health care system. *American Psychologist* 69(1):19–33.
- Kehle-Forbes, S. M., L. A. Meis, M. R. Spont, and M. A. Polusny. 2015. Treatment initiation and dropout from prolonged exposure and cognitive processing therapy in a VA outpatient clinic. *Psychological Trauma* 8(1):107–114.
- Kessler, R. C., P. A. Berglund, M. L. Bruce, J. R. Koch, E. M. Laska, P. Leaf, R. Manderscheid, R. A. Rosenheck, E. E. Walters, and P. S. Wang. 2001. The prevalence and correlates of untreated serious mental illness. *Health Services Research* 36(6 Pt 1):987–1007.
- Lapham, G. T., C. E. Achtmeyer, E. C. Williams, E. J. Hawkins, D. R. Kivlahan, and K. A. Bradley. 2012. Increased documented brief alcohol interventions with a performance measure and electronic decision support. *Medical Care* 50(2):179–187.

- Lash, S. J., R. S. Stephens, J. L. Burden, S. C. Grambow, J. M. DeMarce, M. E. Jones, B. E. Lozano, A. S. Jeffreys, S. A. Fearer, and R. D. Horner. 2007. Contracting, prompting, and reinforcing substance use disorder continuing care: A randomized clinical trial. *Psychology of Addictive Behaviors* 21(3):387–397.
- Lockwood, A., D. T. Steinke, and S. R. Botts. 2009. Medication adherence and its effect on relapse among patients discharged from a Veterans Affairs posttraumatic stress disorder treatment program. *Annals of Pharmacotherapy* 43(7–8):1227–1232.
- Lu, M. W., J. P. Duckart, J. P. O'Malley, and S. K. Dobscha. 2011. Correlates of utilization of PTSD specialty treatment among recently diagnosed veterans at the VA. *Psychiatric Services* 62(8):943–949.
- The MacColl Center. 2017. *Improving chronic illness care*. <http://www.improvingchroniccare.org> (accessed October 4, 2017).
- Morgan, M., A. Lockwood, D. Steinke, R. Schleenbaker, and S. Botts. 2012. Pharmacotherapy regimens among patients with posttraumatic stress disorder and mild traumatic brain injury. *Psychiatric Services* 63(2):182–185.
- Nacasch, N., J. D. Huppert, Y. J. Su, Y. Kivity, Y. Dinshtein, R. Yeh, and E. B. Foa. 2015. Are 60-minute prolonged exposure sessions with 20-minute imaginal exposure to traumatic memories sufficient to successfully treat PTSD? A randomized noninferiority clinical trial. *Behavior Therapy* 46(3):328–341.
- Opioid Therapy Chronic Pain Work Group. 2017. *VA/DoD clinical practice guideline for opioid therapy for chronic pain*. Washington, DC: Department of Defense and Department of Veterans Affairs.
- Quimette, P., D. Vogt, M. Wade, V. Tirone, M. A. Greenbaum, R. Kimerling, C. Laffaye, J. E. Fitt, and C. S. Rosen. 2011. Perceived barriers to care among Veterans Health Administration patients with posttraumatic stress disorder. *Psychological Services* 8(3):212–223.
- Park-Lee, E., R. N. Lipari, S. L. Hedden, L. A. Kroutil, and J. D. Porter. 2017. Receipt of services for substance use and mental health issues among adults: Results from the 2016 National Survey on Drug Use and Health. *NSDUH Data Review*.
- Pfeiffer, P. N., D. Ganoczy, N. W. Bowersox, J. F. McCarthy, F. C. Blow, and M. Valenstein. 2011. Depression care following psychiatric hospitalization in the Veterans Health Administration. *American Journal of Managed Care* 17(9):e358–e364.
- Rosen, C. S., M. A. Greenbaum, J. E. Fitt, C. Laffaye, V. A. Norris, and R. Kimerling. 2011. Stigma, help-seeking attitudes, and use of psychotherapy in veterans with diagnoses of posttraumatic stress disorder. *Journal of Nervous and Mental Disease* 199(11):879–885.
- Rosen, C. S., M. M. Matthieu, S. Wiltsey Stirman, J. M. Cook, S. Landes, N. C. Bernardy, K. M. Chard, J. Crowley, A. Eftekhari, E. P. Finley, J. L. Hamblen, J. M. Harik, S. M. Kehle-Forbes, L. A. Meis, P. E. Osei-Bonsu, A. L. Rodriguez, K. J. Ruggiero, J. I. Ruzek, B. N. Smith, L. Trent, and B. V. Watts. 2016. A review of studies on the system-wide implementation of evidence-based psychotherapies for posttraumatic stress disorder in the Veterans Health Administration. *Administration and Policy in Mental Health and Mental Health Services Research* 43(6):957–977.
- Ruzek, J. I., and R. C. Rosen. 2009. Disseminating evidence-based treatments for PTSD in organizational settings: A high priority focus area. *Behaviour Research & Therapy* 47(11):980–989.
- Schaefer, J. A., R. C. Cronkite, and K. U. Hu. 2011. Differential relationships between continuity of care practices, engagement in continuing care, and abstinence among subgroups of patients with substance use and psychiatric disorders. *Journal of Studies on Alcohol and Drugs* 72(4):611–621.
- Smelson, D., D. Kalman, M. F. Losonczy, A. Kline, U. Sambamoorthi, L. S. Hill, K. Castles-Fonseca, and D. Ziedonis. 2012. A brief treatment engagement intervention for individuals with co-occurring mental illness and substance use disorders: Results of a randomized clinical trial. *Community Mental Health Journal* 48(2):127–132.
- Smith, E. R., K. E. Porter, M. G. Messina, J. A. Beyer, M. E. Defever, E. B. Foa, and S. A. Rauch. 2015. Prolonged exposure for PTSD in a veteran group: A pilot effectiveness study. *Journal of Anxiety Disorders* 30:23–27.
- Spoont, M. R., D. B. Nelson, M. Murdoch, T. Rector, N. A. Sayer, S. Nugent, and J. Westermeyer. 2014. Impact of treatment beliefs and social network encouragement on initiation of care by VA service users with PTSD. *Psychiatric Services* 65(5):654–662.
- Stecker, T., B. Shiner, B. V. Watts, M. Jones, and K. R. Conner. 2013. Treatment-seeking barriers for veterans of the Iraq and Afghanistan conflicts who screen positive for PTSD. *Psychiatric Services* 64(3):280–283.
- Tate, S. R., J. Mrnak-Meyer, C. L. Shriver, J. H. Atkinson, S. K. Robinson, and S. A. Brown. 2011. Predictors of treatment retention for substance-dependent adults with co-occurring depression. *American Journal on Addictions* 20(4):357–365.
- VA (Department of Veterans Affairs). 2010. *VA/DoD clinical practice guideline: Management of opioid therapy for chronic pain*. Washington, DC: Department of Veterans Affairs.
- VA. 2015. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2016. *Department of Veterans Affairs volume II, medical programs and information technology programs, Congressional submission FY 2017 funding and FY 2018 advance appropriations*. Washington, DC: Department of Veterans Affairs.
- VA. 2017. *Response to committee request for information*. Washington, DC: Department of Veterans Affairs.
- VA and DoD (Department of Defense). 2009. *Management of substance use disorders (SUD)*. Management of Substance Use Disorders Working Group, Department of Veterans Affairs and Department of Defense.

- Villafranca, S. W., J. D. McKellar, J. A. Trafton, and K. Humphreys. 2006. Predictors of retention in methadone programs: A signal detection analysis. *Drug and Alcohol Dependence* 83(3):218–224.
- Wang, P. S., M. Lane, M. Olfson, H. A. Pincus, K. B. Wells, and R. C. Kessler. 2005. Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey replication. *Archives of General Psychiatry* 62(6):629–640.
- Watkins, K., and H. Pincus. 2011. *Veterans Health Administration mental health program evaluation: Capstone report*. Arlington, VA: RAND Corporation.
- Watkins, K. E., B. Smith, A. Akincigil, M. E. Sorbero, S. Paddock, A. Woodroffe, C. Huang, S. Crystal, and H. A. Pincus. 2015. The quality of medication treatment for mental disorders in the Department of Veterans Affairs and in private-sector plans. *Psychiatric Services* 67(4):391–396.
- Watts, B. V., B. Shiner, L. Zubkoff, E. Carpenter-Song, J. M. Ronconi, and C. M. Coldwell. 2014. Implementation of evidence-based psychotherapies for posttraumatic stress disorder in VA specialty clinics. *Psychiatric Services* 65(5):648–653.
- Wu, P. C., C. Lang, N. K. Hasson, S. H. Linder, and D. J. Clark. 2010. Opioid use in young veterans. *Journal of Opioid Management* 6(2):133–139.
- Zilcha-Mano, S., S. P. Roose, J. P. Barber, and B. R. Rutherford. 2015. Therapeutic alliance in antidepressant treatment: Cause or effect of symptomatic levels? *Psychotherapy and Psychosomatics* 84(3):177–182.
- Zivin, K., D. Ganoczy, P. N. Pfeiffer, E. M. Miller, and M. Valenstein. 2009. Antidepressant adherence after psychiatric hospitalization among VA patients with depression. *Administration and Policy in Mental Health* 36(6):406–415.

12

Efficient Mental Health Care

Efficient health care systems strive to produce better outcomes for lower costs and use resources in a manner that obtains the best value. There are a variety of approaches for monitoring and improving health system efficiency. This chapter reviews literature on how well the Department of Veterans Affairs (VA) tracks mental health system efficiency in terms of staff productivity and describes the VA's implementation of programs with a goal of increasing integration, which in some cases, enhances efficiency of care. Aspects of efficiency are also addressed in other chapters of the report. For example, the committee discusses the use of information technologies in Chapter 14, which can improve the flow of clinical information and support clinical decision making, as well enhance care delivery (i.e., telehealth). The use of data to identify system inefficiencies and improve processes and resource use to deliver effective care is addressed in Chapter 15.

MENTAL HEALTH WORKFORCE TRACKING AND EFFICIENCY

As discussed in Chapter 8 in the discussion of the VA workforce, the committee identified issues with the adequacy of staffing levels for mental health personnel. In an effort to address some staffing inefficiencies, the VA Office of Mental Health and Suicide Prevention (OMHSP) currently tracks onboard outpatient mental health providers. However, data on mental health workforce provided by OMHSP to the committee did not include information about either social workers or nurses, two of the core mental health professions. Currently the VA lacks the ability to differentiate social workers and nurses who specialize in mental health from other VA employees in these professions (VA, 2017). Given both the unique contributions of each mental health profession, and the significant overlap in scope of practice across mental health professions (see Chapter 4, Table 4-4), the lack of these data is problematic in terms of assessing the size and distribution of the VA mental health workforce and its ability to respond to the mental health needs of veterans. Similarly the VA's information about the nurs-

ing workforce often fails to separate out advanced practice psychiatric nurses, whose expanded scope of practice includes much-needed capacities, such as comprehensive health assessment and diagnosis and medical management of psychiatric disorders. The VA recently reported that it plans to begin tracking inpatient, residential, and homeless program providers as well to help optimize workforce placement efficiency. The VA is also considering capturing additional staffing data by subspecialty program (such as specialty substance use disorder and primary care–mental health integration). This should improve the VA's ability to track staffing for specialty programs, which are currently tracked using self-report survey data (VA, 2016c).

Workforce Productivity

The VA uses clinical productivity measures to monitor the time and effort providers spend delivering care. The units of measurement are work-relative value units (wRVUs) which quantify workload based on time, mental effort and judgment, technical skill and effort, and stress involved in delivering an episode of care. wRVUs are automatically calculated based on the recorded procedures on a patient's electronic medical record (Grant Thornton LLP, 2015).

A comparison of provider productivity between the Veterans Health Administration (VHA) and the private sector found that VA mental health care providers see more encounters than private-sector providers and exceed industry productivity benchmarks (Grant Thornton LLP, 2015). However, the Government Accountability Office (GAO) notes in a 2017 report that the metrics the VA uses to track productivity are insufficient, may not provide quality information, and thus may not accurately reflect actual clinical productivity and efficiency (GAO, 2017). In 2015, RAND reported a similar finding (RAND, 2015). For example, contract positions and advance-practice providers (such as nurse practitioners) are not captured in the productivity data. The GAO also noted that providers do not always accurately code the intensity of their work or the time they spend performing clinical duties. The inaccurate workload and staffing data feed the VA's efficiency models, which results in inaccurate modeling. The GAO notes that the VA central office has developed an analytic tool Veterans Affairs medical centers (VAMCs) can use to identify the drivers of low productivity. However, the VA does not systematically oversee VAMCs' efforts to monitor productivity and efficiency. Nor does the VA require VAMCs to monitor efficiency models. As a result, the VA may be unable to effectively determine factors that contribute to low productivity and may be missing opportunities to identify best practices to improve productivity, and thus improve access to care for veterans (GAO, 2017).

The GAO recommends that the VA expand metrics to include all providers, improve training for coding clinical procedures, require VAMCs to monitor and improve clinical efficiency, and develop a process to oversee VAMCs plans for improving productivity. While the VA concurred, at least in principle, to all the recommendations, the GAO was concerned that some of the VA's outlined plans to address the recommendations did not fully address the issues outlined in the report (GAO, 2017).

CARE INTEGRATION AND COLLABORATION

In this section, the committee presents information about the VA's use of evidence-based care delivery approaches that systematically coordinate care given by the VA's primary care, mental health, and substance-use treatment providers to effectively treat patients with mental health conditions. As discussed below, some research suggests that care coordination can improve efficiency through reduced fragmentation of care and improved patient care. This section reflects the research literature on care integration in general and within the VA.

Background

There are various definitions, models, and strategies used in health care practices today that relate to the objective of improving health through better integration and coordination. Many different terms are used in the field of health integration, such as mental health integration, behavioral health integration, coordinated care, collaborative care, integrated care, and shared care (Gerrity, 2016).

A leading conceptual framework of collaboration and integration, jointly funded by the Substance Abuse and Mental Health Services Administration and the Health Resources and Services Administration, organizes integration models into three main categories—coordinated, co-located, and integrated care—with two levels of degree within each category (Gerrity, 2016; Heath et al., 2013). See Box 12-1, below.

There is a robust body of evidence supporting collaborative and integrated mental health including multiple systematic reviews of more than 90 randomized controlled trials involving over 25,000 patients (Gerrity, 2016). The research demonstrates that collaborative care approaches are effective in treating mental health conditions (such as depression, anxiety, and suicidal ideation), can be cost effective, and are sustainable across various populations and settings. In addition, the coordination of care across clinicians and settings has been shown to result in greater efficiency through reduced fragmentation of care and improved patient outcomes (AHRQ, 2012; Archer et al., 2012; Belsher et al., 2016; Gerrity, 2016; IOM, 2006). The 2014 Institute of Medicine report *Treatment for Posttraumatic Stress Disorder in Military and Veteran Populations: Final Assessment* urged the VA and Department of Defense to expand integrated and coordinated care for posttraumatic stress disorder (PTSD) (IOM, 2014). Integrated care in the veteran population is discussed in the next section.

BOX 12-1 Integration Framework

Coordinated care

Level 1: Minimal collaboration—patients referred to another practice site.

Level 2: Basic collaboration—providers periodically communicate about shared patients.

Co-located care

Level 3: Basic collaboration on site—providers at the same site periodically communicate but maintain separate cultures and separate treatment plans for patients.

Level 4: Close collaboration on site with some system integration and shared records—providers have some face-to-face communication about shared patients and feel part of a team.

Integrated care

Level 5: Close collaboration approaching an integrated practice—collaborative treatment planning for shared patients, but separate planning for other patients.

Level 6: Full collaboration in a merged integrated practice for all patients—a team of providers jointly develops a single treatment plan for patients. Patients experience their care as a single system treating the whole person.

SOURCES: Gerrity, 2016; Heath et al., 2013.

Care Integration and Collaboration at the Veterans Health Administration

Primary Care–Mental Health Integration (PC-MHI)

Primary care–mental health integration (PC-MHI) is the VA's coordinated care approach for delivering mental health care services to veterans in collaboration with primary care providers. PC-MHI is implemented within the VA's patient-centered medical home model known as the Patient-Aligned Care Team (PACT) (see more about PACT in Chapter 10). In 2008 the VA mandated that all VA medical centers and large community-based outpatient clinics have integrated mental health services operating in primary care clinics. The two core components of PC-MHI programs are care management and co-located collaborative care services (Pomerantz and Sayers, 2010; VA, 2008).

Co-located collaborative care involves embedding mental health professionals within primary care settings to facilitate collaboration with primary care providers. Co-located collaborative care providers follow up on positive mental health screens, hold conjoint appointments, educate providers on the assessment and treatment of mental health concerns, and collaborate in comprehensive treatment planning, which often includes brief behavioral interventions that are appropriate for the primary care setting. For patients with more severe or complex conditions, co-located collaborative care providers facilitate referrals to specialty mental health care, which are often delivered same day (Beehler et al., 2015).

Care management activities, which are often telephone based and delivered by nursing staff, include ongoing patient assessment, service coordination (including facilitating communication between primary care and mental health providers), treatment adherence monitoring, and patient education. The care management approaches supported in VA primary care settings include the Behavioral Health Laboratory, which provides evidence-based clinical services supporting mental health and substance abuse management as well as Translating Initiatives in Depression into Effective Solutions (Beehler et al., 2015).

PC-MHI Effectiveness

Studies involving the veteran population have found that the VA's PC-MHI program is an effective approach to integrating mental health in primary care. The use of PC-MHI has been found to be associated with an increase in psychiatric diagnosis detection rates (Bohnert et al., 2016; Brawer et al., 2011; Zivin et al., 2010) and with increased odds of a patient initiating and continuing treatment (Bohnert et al., 2013, 2016; Brawer et al., 2011; Szymanski et al., 2012). PC-MHI is also improving access to services. Seal et al. (2011) found that among 526 Iraq and Afghanistan war veterans, veterans seen in an integrated care clinic were significantly more likely to receive mental health evaluations within 30 days of their initial visit than those receiving usual (non-integrated) primary care (men: odds ratio [OR] 1.30; 95% confidence interval [CI] = 1.13–1.50; women OR 2.94; 95% CI = 1.41–6.18). The authors suggest that these same-day evaluations provide an opportunity to initiate the interventions immediately or to provide an immediate referral to additional services as needed. Research also shows that PC-MHI appears to be reaching veterans in demographic subgroups that are traditionally less likely to use specialty mental health care; the users tend to be slightly younger, female, nonwhite, nonmarried, and without substantial service-connected disability status (Johnson-Lawrence et al., 2012).

In addition, studies show that PC-MHI is associated with a lower risk of poor outcomes for veterans with mental illness. Trivedi et al. (2015) examined whether PC-MHI involvement was associated with a decreased risk of emergency department (ED) visits, hospitalizations, and mortality among 1,147,022 veterans diagnosed with a mental disorder and seen within VA primary care settings from April 2010 to March 2011. Researchers found that having at least one contact with PC-MHI was associated with better outcomes (lower odds of an ED visit, hospitalization, and mortality) among veterans with PTSD,

depression, substance use disorder, serious mental illness, and anxiety, compared with patients who did not have PC-MHI, although not all improvements across every disorder–outcome combination were significant. This finding is consistent with other research showing that collaborative care models mitigate the risk of poor outcomes that can be associated with mental illnesses (AHRQ, 2012; Archer et al., 2012; Gerrity, 2016; No Author, 2012).

PC-MHI Implementation

The VA reports that it provided more than 1 million PC-MHI encounters in 2015, which represents an increase of 8 percent from 2014 and an increase of 28 percent from 2013. According to the VA, the PC-MHI program is widely established across the system: 98.5 percent of the very large and 81.2 percent of large community-based outpatient clinics have implemented the program (VA, 2016a). However, significant local variation in PC-MHI implementation exists across VA sites nationally, with providers engaging in co-located collaborative care only, in care management only, or in combined co-located collaborative care and care management functions (Beehler et al., 2015).

Beehler et al. (2015) assessed PC-MHI program implementation by examining PC-MHI provider adherence to either care management or co-located collaborative care. To explore PC-MHI provider adherence to PC-MHI-specific tasks or procedures, the investigators analyzed self-report data captured with a psychometrically valid instrument, the Primary Care Behavioral Health Provider Adherence Questionnaire. The respondents were 173 VHA mental health providers (30 percent response rate) who had provided clinical services in primary care for at least 25 percent of their duties in 2012. The findings showed that a majority of mental health providers demonstrated moderate levels of adherence, with the levels of adherence differing by provider educational background and psychotherapy approach, the level of clinic integration, and previous PC-MHI training. Adherence was typically lowest in relation to collaboration with other primary care staff. The investigators concluded that PC-MHI providers could clearly benefit from multiple support strategies regarding how to overcome barriers to integration with primary care teams. The investigators indicated that while the use of provider tools and additional training in interprofessional communication may be important, achieving high levels of clinic integration will likely require addressing the larger organizational context through improved leadership support, the articulation of shared goals across teams, and systematic quality improvement efforts. Moreover, PC-MHI practice guidelines, which do not exist currently, may be especially beneficial in addressing undesirable variations in care (Beehler et al., 2015).

Behavioral Health Interdisciplinary Program

The Behavioral Health Interdisciplinary Program (BHIP) is a team-based program designed for the general outpatient mental health setting within the VA. BHIP teams, which are composed of mental health professionals and administrative staff, work together to focus on the veteran's mental health and well-being. Mental health professionals engaged in BHIP can include psychiatrists, psychologists, nurses, social workers, marriage and family therapists, clinical pharmacists, licensed professional mental health counselors, peer specialists, and others (Weaver, 2014). BHIP's goals are to provide improved access to care tailored to a veteran's needs and facilitated by collaborative and coordinated care management. An incremental VA-wide implementation of BHIP was initiated in 2014. All VA facilities have initiated at least some level of implementation of BHIP teams, although the extent of implementation varies across sites (Barry et al., 2016).

Barry et al. (2016) conducted a formative evaluation to gather information about the implementation of BHIP in order to understand staff members' perspectives on the benefits and challenges of the BHIP model. The benefits of BHIP listed by staff included increased staff communication, supportive relationships, shared decision making, and high quality of care for veterans. The challenges hampering BHIP implementation and team functioning cited by staff were a lack of well-defined or overlapping BHIP roles (for example, clinical management roles), staffing shortages, a lack of knowledge about BHIP principles or expectations, and a lack of leadership guidance. In addition, difficulty finding time in staff schedules and a lack of dedicated BHIP team meeting time for staff reduced participation in team meetings.

Stepped-Care Approaches

As barriers to mental health care remain exacerbated by growing demand and shortage of manpower, a type of integrated care, called stepped care, is being viewed as a strategy to achieve greater service efficiency. Stepped care seeks to treat patients at the lowest appropriate intensity of care that is still likely to provide benefits, to monitor a patient's progress longitudinally, and to reserve more intensive treatments for those patients who do not benefit from first-line treatments or for those with more complex clinical presentations (Firozi, 2017; VA, 2016b).

Box 12-2 shows the components of the VA's version of a stepped-care approach for patients with a primary diagnosis of PTSD, depression, substance use disorder, and other mental health conditions (Patel et al., 2015). PC-MHI is the first line of the stepped-care model. Patients needing long-term mental health care are assigned to a collaborative team in BHIP. Complex cases are managed in specialty care and inpatient settings. The VA has used team-based models designed to address the needs of patients with particular mental health conditions, such as PTSD clinical teams and mental health intensive case management (MHICM) for patients with serious mental illness. However, more recently, team-based care models within general (rather than specialty) outpatient mental health settings have been implemented (Barry et al., 2016).

The goal of the VA's stepped-care model for mental health is to provide care at the lowest appropriate level possible. Figure 12-1 provides more detail about the continuum of VA mental health care services.

While research has been conducted on the implementation of the component parts of the stepped-care model (for example, PC-MHI, BHIP), the committee is not aware of any research that has evaluated the effectiveness of the VA's stepped care model as a whole. Research findings about stepped-care models are relevant to concerns regarding the VA's limited capacity to ensure that adequate mental health resources are available to meet the needs of veterans.

BOX 12-2 **Stepped-Care Model for Mental Health at the VHA**

Primary care—mental health integration (PC-MHI) → Behavioral Health Interdisciplinary Program (BHIP) → specialty care (PTSD, SUD, MHICM) → tertiary and residential care (residential rehabilitative treatment program)

NOTES: PTSD = posttraumatic stress disorder; SUD = substance use disorder; MHICM = mental health intensive case management.

SOURCE: Patel et al., 2015.

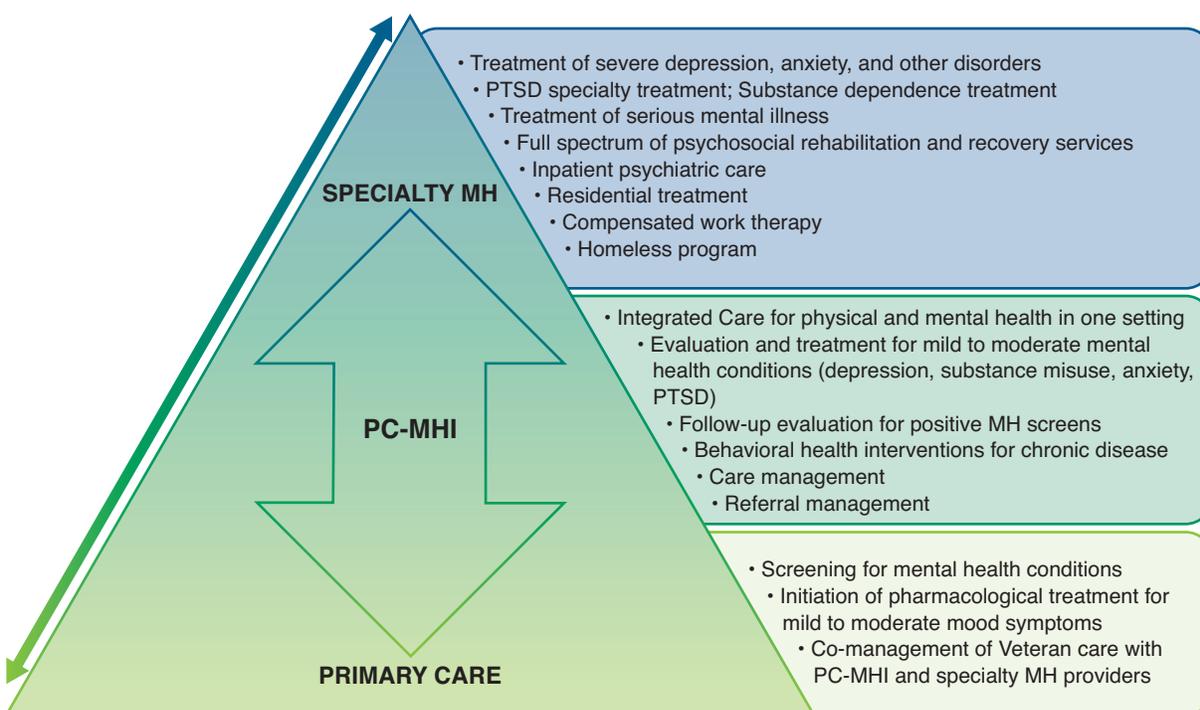


FIGURE 12-1 Continuum of VA mental health services.
SOURCE: Patel et al., 2015.

In the first large, randomized effectiveness trial on collaborative care for PTSD and depression in the military health system (Belsher et al., 2016; Engel et al., 2014, 2016), researchers compared a stepped-care model, Stepped Enhancement of PTSD Services Using Primary Care (STEPS-UP) with the usual care, an integrated mental health approach called RESPECT-Mil. Patients with probable PTSD or depression or both were recruited at six large military treatment facilities, and 666 patients were enrolled and randomized to STEPS-UP or the usual collaborative care.

Engel et al. (2016) found that the stepped-care model, STEPS-UP, resulted in improved PTSD and depression outcomes above the traditional collaborative care model, RESPECT-Mil, in the military health system. Belsher et al. (2016) reported that STEPS-UP was more effective at increasing the quantity of mental health care services received across primary care and mental health specialty care settings as well as increasing psychiatric medication uptake and coverage. The use of STEPS-UP resulted in a more careful triage of patients, so that those with a comorbid diagnosis were more likely to be sent to specialty care and receive a greater quantity of care than those with less clinical complexity. In contrast, patients receiving care as usual all had the same likelihood of being referred to specialty care, regardless of their clinical complexity. The investigators concluded that managing less symptomatic patients in the lower steps might be efficient and cost effective and might also improve specialty care access for more clinically complex patients.

Private-Sector Partnerships for Veterans and Families

A new model of mental health care is trying to remove barriers to mental health care for veterans as well as their families; family members are generally not eligible to receive care at the VA and there-

fore must seek care elsewhere. Veterans' family members seeking care in the community may find it difficult to receive care that is both sensitive to the issues that veterans' families face and coordinated across providers.

In New York State, a partnership between the VA health system and a private-sector provider was established to create a mental health center that co-locates and coordinates care for veterans and their families. The Northwell Health System and the Northport Veterans Affairs Medical Center created the Unified Behavioral Health Center (UBHC) for Military Veterans and Their Families, which offers coordinated care for veterans and their families by locating VA and private providers side by side at the same facility. While the center was not designed to be fully integrated—one side serves veterans, and the other side is available to service members, veterans, and their families, with each side having separate entrances, information systems, and performance-monitoring processes—the infrastructure supports the coordination of care. There is convenient access to mental health services for all participants, and the exchange of information between the different sides is facilitated through team meetings, other in-person interactions, and phone contact among providers (Eberhart et al., 2016).

RAND researchers conducted an evaluation of the center's activities to assess the viability of this new approach to mental health care, identify implementation challenges and successes, and assess the impact on patient health. The evaluation team found that the patients reported satisfaction with their experiences at the center and the care they received. In addition, there is preliminary evidence of improved health outcomes (Eberhart et al., 2016). Adult patients showed improvements in symptoms of depression and PTSD, in family functioning, and in the quality of life. Child patients exhibited fewer mental health problems. The RAND team concluded that the UBHC has the potential to be helpful to the veterans and families it serves, and the team made several recommendations for improving the model. Areas for improvement include enhancing collaboration, expanding staffing and space, delivering a continuum of evidence-based services, and prioritizing outcome monitoring and quality improvement (Eberhart et al., 2016).

FINDINGS FROM THE COMMITTEE'S SITE VISITS

From the site visit information, the committee identified several ways the VA has taken steps to improve the efficiency of the mental health services it delivers. These include offering evidence-based practices (EBPs), time-limited services, shorter appointments, and group treatment sessions (versus individual sessions), which can serve more patients within the allotted time.

Veterans expressed mixed feelings about group treatment modalities. Those who reported positive experiences said that being in a group helped them feel less isolated in their experiences. A typical response was, "I was able to realize that I wasn't alone. I'm going through a lot of the same things that other veterans are going through." [Washington, DC]

However, negative reactions to group therapies were also expressed to the site visitors. As a clinician explained:

For an average veteran who is afraid to talk about his issues in groups, he'll . . . have that first appointment with someone individually. Then the next referral would be to a group. That is often too much for them. They'll wash out of that one. [Temple, Texas]

Many veterans said that groups were a "second-best" treatment that impeded progress in resolving their issues, given the limited time available to discuss their problems and the lack of privacy inherent in group discussions. As one disgruntled veteran remarked, "I was like 'Step back! Won't be doing group no more.'"

An additional concern was that hearing other veterans' accounts of trauma was re-traumatizing. The spouse of an Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) veteran said that her husband's participation seemed to make him more symptomatic: "I noticed he was getting more depressed. He'd come home and tell me the stories of the people that were there . . . things he couldn't relate to." [East Orange, New Jersey]

In contrast to the mixed reviews of group therapy for substance use disorder and mental problems, another type of group—psychoeducational—was viewed as helpful. Most VA medical centers provide psychoeducational groups—or "classes," as veterans and VA clinicians referred to them. Their purpose is to acquaint veterans with the services offered by the VA, provide information about the sequelae of military trauma, and teach coping skills. Many veterans found the classes helpful for understanding their experiences of PTSD and adjusting to life after deployment. As one noted:

I started showing up for [the group] . . . I read all these symptoms . . . every single word in it—I experienced for so many years. I was so overwhelmed that I decided to go to the restroom . . . After I came back, I continued with the class. [Palo Alto, California]

While the VA has taken steps to improve service efficiency, this does not mean that the course of treatment is shortened for all veterans. Site visit interview data indicate that a number of OEF/OIF/OND veterans were receiving psychotherapy services from the VA for multiple years. For these individuals, a more intensive cognitive processing therapy (CPT) or prolonged exposure (PE) therapy was helpful and then was followed up with "checking in" with a psychotherapist monthly or every other month. One such veteran explained:

Now I come to check in once every two months. . . . Sometimes I've been stuck in traffic trying to get here and Dr. _____ [psychologist] will call me and say, "Hey, are you okay? Do you need anything? How is everything going?" If I need anything more, all I have to do is call and set up another appointment. [Tampa, Florida]

In contrast to this "stepped-down" approach, many veterans reported treatment histories marked by multiple short-term, but intensive, treatments provided by the VA. These episodes of intensive treatment were punctuated by years of less intensive monthly, semimonthly, or bimonthly psychotherapy visits. Other veterans had psychiatric visits alongside participation in groups. As one veteran reported:

I've been in five groups. I'm in a permanent group with these guys [gestures to other veterans in room] now, and I like it. It's for veterans of OEF/OIF. I got a psychiatrist, as they do. I've seen her once every 3 months. [Seattle, Washington]

Other times, veterans seemed to have little ongoing clinical management. Site visitors spoke with a veteran in Temple, Texas, who said he had experienced residential PTSD treatment three times. This veteran seemed to have real difficulties functioning without ongoing help. He said, "One of the scariest things is to actually leave the [residential PTSD] program, because all those wounds, all those scars, all those memories are so open and then you go back in the world. The first time I came through the program, I got in trouble 5 months after with the law." A veteran in Seattle, Washington, explained that he was treated in three residential programs back-to-back: "I did a [residential] substance abuse program. That was 28 days. Turned around and immediately transferred over to the PTSD program. That was another 28 days. Now I'm in the sixth month of a [VA program for homeless veterans with mental health issues]."

A VA provider explained that providing EBPs sequentially was a strategy for managing patients with treatment-resistant disorders. She gave an example of one such veteran:

She's [veteran] been through PE, CPT we're doing ACT [acceptance and commitment therapy] for PTSD and depression right now. This is a really good example of, "All right, we're going to try the things we have . . . and as soon as we get new ones, we're going to keep offering." [Palo Alto, California]

These veterans experience numerous EBPs whose efficacy has been assessed only as a single course of treatment. Whether patients benefit from repeating courses of outpatient and residential treatments is unclear, and the anecdotal evidence offered by VA clinicians suggests that it may not be beneficial. More attention to designing best practices for the efficient and effective clinical management of chronic, non-psychotic psychiatric disorders seems warranted.

Finally, VA clinicians described protocols for mental health visits that left them with insufficient time to address patients' presenting problems. A VA clinician offered this anecdote:

I saw a patient over the weekend and admitted him while on call . . . for the last 6 weeks he'd been smoking crack cocaine and drinking a pint of whisky a day. I asked him, "How do you afford all that?" He said, "Doc, I steal and I swindle. That's what I do to survive." This guy—it really hits you hard emotionally to see someone who's fallen that low. You want to help them. But according to my documentation, I need to ask him next, "So what do you do in your leisure time?" It's not appropriate to ask that at that point. I need to be the judge of that. [Temple, Texas]

Another clinician at a different site [Chicago, Illinois] explained that if he "filled out all the questionnaires [documentation] correctly, I wouldn't be able to take care of patients. We all check boxes." This clinician went on to describe how the protocols make the provider seem insensitive: "You [veteran just] told me that you're really happy because a wonderful thing happened. You're [clinician] like, 'Well, it's the annual depression scale, so let's ask you about whether you're depressed.'"

Some providers said that practicing this way leaves the false impression that veterans are receiving quality mental health care. As one explained, "Oh, we had 5,000 veterans last year . . . 5,000 times the questions were answered. We're doing our job." [Chicago, Illinois]

SUMMARY

Based on findings from the committee's site visits and literature research, this chapter presented information about evidence-based care delivery approaches that achieve efficiency by systematically coordinating care given by VA primary care, mental health, and substance-use treatment providers in order to effectively treat patients with mental health conditions. A summary of the committee's findings on this topic is outlined below.

- The VA has implemented models of collaborative and integrated care to improve the delivery of mental health treatment including PC-MHI, BHIP, and a continuum of care based on a stepped-care model approach.
- The VA's PC-MHI program is a coordinated care model that connects mental and physical health, which has been shown to increase efficiency through reduced fragmentation of care and better mental health outcomes.
- Studies show that PC-MHI practice guidelines, which do not exist currently, may be especially beneficial in addressing undesirable variations in care.
- BHIP is a team-based model implemented in outpatient mental health that is intended to provide collaborative, veteran-centered, and coordinated care.
- The limited research available about BHIP shows a need to overcome barriers to team-based collaboration within this program.

- Although promising, objective data and research evidence evaluating PC-MHI and BHIP are limited.
- PC-MHI and BHIP are components of the VA's stepped-care model for mental health, which has a goal to treat patients at the lowest appropriate intensity of care that is still likely to provide benefit, while reserving more intensive treatments for those patients who have more complex clinical presentations.
- While there is some evaluative information and data on the components of the VA's stepped-care model for mental health care, the committee is not aware of any research that examines the effectiveness of the stepped-care model as a whole.
- Offering EBPs that have been proven effective for treating PTSD, offering time-limited services (for example, 12 PE sessions), keeping appointments short, and offering more group treatments than individual services are some strategies that the VA has employed in an attempt to deliver care more efficiently.
- It is challenging to implement these efficiencies in a way that does not compromise quality and patient-centered care.
- The VA tracks provider workforce productivity data; however, the data do not include all provider types and reviews have questioned their reliability and usefulness.

REFERENCES

- AHRQ. 2012. AHRQ review finds evidence of the effectiveness of collaborative care interventions. *Psychiatric Services* 63(10):1055.
- Archer, J., P. Bower, S. Gilbody, K. Lovell, D. Richards, L. Gask, C. Dickens, and P. Coventry. 2012. Collaborative care for depression and anxiety problems. *Cochrane Database of Systematic Reviews* 10:CD006525.
- Barry, C. N., K. M. Abraham, K. R. Weaver, and N. W. Bowersox. 2016. Innovating team-based outpatient mental health care in the Veterans Health Administration: Staff-perceived benefits and challenges to pilot implementation of the Behavioral Health Interdisciplinary Program (BHIP). *Psychological Services* 13(2):148–155.
- Beehler, G. P., J. S. Funderburk, P. R. King, M. Wade, and K. Possemato. 2015. Using the Primary Care Behavioral Health Provider Adherence Questionnaire (PPAQ) to identify practice patterns. *Translational Behavioral Medicine* 5(4):384–392.
- Belsher, B. E., L. H. Jaycox, M. C. Freed, D. P. Evatt, X. Liu, L. A. Novak, D. Zatzick, R. M. Bray, and C. C. Engel. 2016. Mental health utilization patterns during a stepped, collaborative care effectiveness trial for PTSD and depression in the military health system. *Medical Care* 54(7):706–713.
- Bohnert, K. M., P. N. Pfeiffer, B. R. Szymanski, and J. F. McCarthy. 2013. Continuation of care following an initial primary care visit with a mental health diagnosis: Differences by receipt of VHA primary care–mental health integration services. *General Hospital Psychiatry* 35(1):66–70.
- Bohnert, K. M., R. K. Sripada, J. Mach, and J. F. McCarthy. 2016. Same-day integrated mental health care and PTSD diagnosis and treatment among VHA primary care patients with positive PTSD screens. *Psychiatric Services* 67(1):94–100.
- Brawer, P. A., A. M. Brugh, R. P. Martielli, S. P. O'Connor, J. Mastnak, J. F. Scherrer, and T. E. Day. 2011. Enhancing entrance into PTSD treatment for post-deployment veterans through collaborative/integrative care. *Translational Behavioral Medicine* 1(4):609–614.
- Eberhart, N. K., M. S. Dunbar, O. Bogdan, L. Xenakis, E. R. Pedersen, and T. Tanielian. 2016. *The unified behavioral health center for military veterans and their families*. Santa Monica, CA: RAND Corporation.
- Engel, C. C., R. M. Bray, L. H. Jaycox, M. C. Freed, D. Zatzick, M. E. Lane, D. Brambilla, K. Rae Olmsted, R. Vandermaas-Peeler, B. Litz, T. Tanielian, B. E. Belsher, D. P. Evatt, L. A. Novak, J. Unutzer, and W. J. Katon. 2014. Implementing collaborative primary care for depression and posttraumatic stress disorder: Design and sample for a randomized trial in the U.S. military health system. *Contemporary Clinical Trials* 39(2):310–319.
- Engel, C. C., L. H. Jaycox, M. C. Freed, R. M. Bray, D. Brambilla, D. Zatzick, B. Litz, T. Tanielian, L. A. Novak, M. E. Lane, B. E. Belsher, K. L. Olmsted, D. P. Evatt, R. Vandermaas-Peeler, J. Unutzer, and W. J. Katon. 2016. Centrally assisted collaborative telecare for posttraumatic stress disorder and depression among military personnel attending primary care: A randomized clinical trial. *JAMA Internal Medicine* 176(7):948–956.

- Firozi, P. 2017. *VA secretary: Less than 1 percent of calls to suicide hotline go unanswered*. <http://thehill.com/homenews/administration/330336-va-secretary-less-than-1-percent-of-calls-to-suicide-hotline-go> (accessed May 11, 2017).
- GAO (Government Accountability Office). 2017. *VA Health Care: Improvements Needed in Data and Monitoring of Clinical Productivity and Efficiency*. Washington, DC: Government Accountability Office.
- Gerrity, M. 2016. *Evolving models of behavioral health integration: Evidence update 2010–2015*. New York: Milbank Memorial Fund.
- Grant Thornton LLP. 2015. *Assessment G (staffing/productivity/time allocation)*. Chicago: Grant Thornton LLP.
- Heath, B., K. Reynolds, and P. W. Romero. 2013. *A standard framework for levels of integrated health care*. Washington, DC: Substance Abuse and Mental Health Services Administration and Health Resources and Services Administration.
- IOM (Institute of Medicine). 2006. *Improving the quality of health care for mental and substance-use conditions: Quality chasm series*. Washington, DC: The National Academies Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- Johnson-Lawrence, V., K. Zivin, B. R. Szymanski, P. N. Pfeiffer, and J. F. McCarthy. 2012. VA primary care-mental health integration: Patient characteristics and receipt of mental health services, 2008–2010. *Psychiatric Services* 63(11): 1137–1141.
- Patel, E. L., C. Rothschild, J. Bean, R. Jill Pate, S. Jabeen, and N. Heidelberg. 2015. *Working together: Interprofessional clinical care in action*. Washington, DC: Department of Veterans Affairs.
- Pomerantz, A. S., and S. L. Sayers. 2010. Primary care–mental health integration in healthcare in the Department of Veterans Affairs. *Families, Systems, & Health* 28(2):78–82.
- RAND Corporation. 2015. *Assessment B (health care capabilities)*. Santa Monica, CA: RAND Corporation.
- Seal, K. H., G. Cohen, D. Bertenthal, B. E. Cohen, S. Maguen, and A. Daley. 2011. Reducing barriers to mental health and social services for Iraq and Afghanistan veterans: Outcomes of an integrated primary care clinic. *Journal of General Internal Medicine* 26(10):1160–1167.
- Szymanski, B. R., K. M. Bohnert, K. Zivin, and J. F. McCarthy. 2012. Integrated care: Treatment initiation following positive depression screens. *Journal of General Internal Medicine* 28(3):346–352.
- Trivedi, R. B., E. P. Post, H. Sun, A. Pomerantz, A. J. Saxon, J. D. Piette, C. Maynard, B. Arnow, I. Curtis, S. D. Fihn, and K. Nelson. 2015. Prevalence, comorbidity, and prognosis of mental health among U.S. veterans. *American Journal of Public Health* 105(12):2564–2569.
- VA (Department of Veterans Affairs). 2008. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2016a. *Department of Veterans Affairs volume II: Medical programs and information technology programs. Congressional submission FY 2017 funding and FY 2018 advance appropriations*. Washington, DC: Department of Veterans Affairs.
- VA. 2016b. *Restoring trust in veterans health care: Fiscal year 2016 annual report*. Washington, DC: Department of Veterans Affairs.
- VA. 2016c. *VHA workforce and succession strategic plan 2016*. Washington, DC: Department of Veterans Affairs.
- VA. 2017. *Response to committee request for information*. Washington, DC: Department of Veterans Affairs.
- Weaver, K. 2014. *Behavioral Health Interdisciplinary Program (BHIP) team based-care*. Washington, DC: Department of Veterans Affairs.
- Zivin, K., P. N. Pfeiffer, B. R. Szymanski, M. Valenstein, E. P. Post, E. M. Miller, and J. F. McCarthy. 2010. Initiation of primary care–mental health integration programs in the VA health system: Associations with psychiatric diagnoses in primary care. *Medical Care* 48(9):843–851.

Equitable Mental Health Care

Equitable mental health care requires that different populations and subgroups of users be afforded equal access to care within a given system. Sociocultural barriers such as stigma and discrimination affect access for various populations, including racial, ethnic, and sexual minority groups and also groups with special needs, such as the homeless. For example, if a health system user or (potential user) perceives or experiences discrimination from a provider or from the public, the experience may discourage the user from seeking services. This chapter summarizes recent studies that examine racial and ethnic disparities in mental health diagnosis and treatment provided by the Department of Veterans Affairs (VA) as well as in adherence to care among veterans. It also addresses issues affecting women veterans. The chapter describes the access and stigma issues faced by various select population groups and relevant findings from this study's survey and site visits.

DISPARITIES IN DIAGNOSIS

A 2007 systematic review of racial and ethnic disparities in the VA health care system noted findings from several studies that black and Hispanic patients were more frequently diagnosed with and treated for psychotic disorders (for example, schizophrenia), while white veterans were more frequently diagnosed with and treated for affective disorders (for example, bipolar disorder and depression) (Saha et al., 2007). According to VA data, minority veterans also are more likely to have a posttraumatic stress disorder (PTSD) diagnosis than non-minorities (5.8 versus 5.0 percent) (VA, 2017b). A similar pattern among African Americans has been found in the civilian population (Gara et al., 2012). Reasons for these diagnostic and treatment differences are unclear; however, among veterans, the difference may be attributed to the fact that minorities are more likely to be exposed to trauma while serving in the military (VA, 2017b). The review notes, however, that black veterans might benefit from having black clinicians (Saha et al., 2007). Non-whites also were more skeptical of interventions and treatment plans, which in turn may make them less likely to adhere to the course of treatment. This skepticism may

be fueled by a lack of familiarity with interventions or past experiences of discrimination. Black and Latino veterans were less likely to have a primary care physician and are less likely to be adherent to treatment plans than whites. These disparities were attributed to variations in the quantity and quality of patient–provider communication, shared decision making, and patient participation (Saha et al., 2007).

In a large study of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) veterans who received care at the VA between 2001 and 2013 (N = 792,663), Koo et al. (2015a) looked at differences across race/ethnicity and gender in mental health diagnoses. Most measures were the same across gender, but, with a few exceptions, most differed by race and ethnicity. White veterans were more likely than most racial/ethnic minority veterans to be diagnosed with anxiety disorders. This is consistent with previous research among non-veterans (Asnaani et al., 2010). The authors suggested that diagnostic criteria for anxiety disorders may not be culturally sensitive and consequently may not accurately capture the experiences of racial/ethnic minorities. Other differences included American Indian and Alaskan Native (AI/AN) male veterans who were more likely to be diagnosed with alcohol and drug use disorders than white veterans. Furthermore, Asian and Pacific Islander (A/PI) men and women were less likely to have a mental health diagnosis than white veterans. The authors note that A/PI and AI/AN groups are often lumped together in studies that look at racial and demographic differences. The findings from this study suggest that the unique characteristics of these two groups may be lost when they are grouped together.

A retrospective study of OEF and OIF veterans who were engaged in PTSD treatment between 2007 and 2011 and had screened positive for PTSD at the start of treatment (N = 79,938) revealed differences in PTSD screening results across race/ethnic and gender groups (Koo et al., 2016). Notably, Asian/Pacific Islander women and black and Hispanic men were more likely to screen positive for PTSD at baseline than white veterans, indicating that perhaps the screens do a better job of detecting PTSD in these groups or that these groups may be more inclined to over-endorse symptoms on the screeners. These are speculative explanations, and further exploration is necessary to understand the differences in screening results between the groups (Koo et al., 2016).

TREATMENT DISPARITIES

Manhpra et al. (2016) looked at the characteristics of veterans that were associated with different treatments provided by the VA for opioid use disorder. The authors found that demographic (including racial) characteristics—rather than medical or psychiatric or service use differences—were associated with the choice of whether buprenorphine or methadone was offered for treatment. The authors looked at veterans with an opioid use disorder diagnosis who received VA services in 2012 and who were treated with only buprenorphine (N = 5,670), only methadone (N = 6,252), or both buprenorphine and methadone in the same year (N = 2,513). White veterans were more likely to be prescribed only buprenorphine than only methadone (relative risk [RR] 1.54), whereas African American veterans were far less likely to be prescribed buprenorphine only than they were methadone only (RR 0.30). Logistic regression analysis revealed that black race was associated with lower odds of receiving only buprenorphine versus only methadone (odds ratio [OR] 0.39; 95% confidence interval [CI] 0.35-0.43). Differences in treatment received remained after controlling for age, income, and rural location.

In similar fashion, Quinones et al. (2014) examined race- and ethnicity-based differences in how veterans were treated for depression (antidepressants and psychotherapy). The authors used a large sample (62,095) of 2009–2010 medical record data of chronically depressed veterans. They examined how many received adequate antidepressant therapy (defined as sufficient prescriptions filled to take the medication for at least 80 percent of the days within the 6-month study period), how many received

adequate psychotherapy (at least 6 sessions during the 6-month study period), and how many received guideline concordant care (either adequate antidepressant therapy or psychotherapy or both). The rates of receiving adequate antidepressant therapy and guideline concordant care were lower for almost all non-white groups than for whites. The authors note these discrepancies were largely driven by differences in antidepressant therapy, a finding that is supported by other research on the topic (Davis et al., 2014). The results do not necessarily imply that minority veterans receive lower quality care since it is unclear whether patients are offered antidepressants but refuse them or whether the providers fail to offer them altogether. The reluctance to take antidepressants may be more common among African Americans and Hispanics than among whites (Cooper et al., 2003), and patients' refusal to take antidepressants that are offered may be driving the difference. The rates of receiving adequate psychotherapy showed the opposite pattern, with that treatment being more commonly received by non-white veterans. This finding suggests that minorities may prefer or request psychotherapy more often than whites and possibly in lieu of pharmacotherapy. On the other hand, the difference in treatment could also have a totally different explanation. After adjusting for distance from the facility where the diagnosis was received, the racial and ethnic differences in psychotherapy received were no longer significant, suggesting that those who live farther away from the facility might have more trouble scheduling (or less interest in traveling for) psychotherapy sessions than those who live closer.

A recent study examined differences in mental health treatment adherence across racial and ethnic groups. Among a sample of 311 older veterans (60 or over), Kales et al. (2016) looked for predictors of antidepressant nonadherence. Overall, nonadherence was reported by 29 percent of the sample in an interview 4 months after receiving their diagnosis and antidepressant prescription. Nonadherence was significantly associated with being African American, with being single, and with having greater general comorbidity. This finding is supported by other research on the topic, which has found that black veterans are more likely than white veterans to not adhere to antidepressants (Chermack et al., 2008) and that among civilians, minority groups (other than AI/AN) are less adherent than white veterans (Rossom et al., 2016).

In a prospective national cohort design Spont et al. (2015) looked for disparities in PTSD treatment adherence in veterans recently diagnosed with PTSD across racial and ethnic groups (N = 6,788). The researchers used analyses of self-administered surveys and patient records and prescription records to examine treatment patterns in the 6 months following a PTSD diagnosis, controlling for treatment need, access factors, age, gender, and treatment beliefs. Their analyses revealed lower treatment retention for pharmacotherapy for Latino and African American veterans than for white veterans. African American veterans also had a lower odds of retention in treatment overall, suggesting that psychotherapy was not compensating entirely for low pharmacotherapy retention and consistent with the findings cited above for the treatment of depression and substance use (Kales et al., 2016; Quinones et al., 2014).

ACCESS TO MENTAL HEALTH CARE SERVICES FOR SELECT POPULATIONS

Tailoring treatment to a variety of select populations, including racial, ethnic, sexual minority (that is, lesbian, gay, bisexual, and transgender [LGBT]) and homeless groups is a challenge in the VA, as the population of patients receiving mental health care is diverse. While only a few mental health programs integrate racial, cultural, or ethnic group-specific programming, the VA has developed specific PTSD programming for American Indian veterans that considers their traditions and oftentimes rural location. For this program, providers may incorporate cultural traditions, such as the use of shamans, sweat lodges, and traditional medicines into treatment plans when appropriate (Gross, 2007; IOM, 2014). The VA also provides sensitivity and educational training to providers on cultural differences among black, Hispanic,

or Asian and Pacific Islander veterans (IOM, 2014). Additionally, homeless veterans have unique health needs that the VA is working to address (VA, 2016). LGBT veterans are another select population served by the VA. To address their needs, the VA has developed policies, provider-education programs, and services to ensure high-quality patient-centered care for LGBT veterans (VA, 2015b).

Access for Women Veterans

In response to the growing number of female veterans, the VA has instituted a policy that helps address the needs of women seeking mental health services. Every VA medical center (VAMC) has a women veterans program manager in place to advocate for and coordinate care for women seeking services. Studies of OEF and OIF female veterans suggest that they exhibit a higher need for mental health care than women who served during previous conflicts, with reports that 17 percent of female OEF/OIF veterans are diagnosed with PTSD (compared to other eras, in which 8 to 9 percent of women veterans were diagnosed with PTSD) and 23 percent are diagnosed with depression (Litz et al., 1997; Maguen et al., 2009; Schlenger et al., 1992). More recent data suggest that between one-half and one-third of women veterans indicate that they need counseling for depression (48 percent), relationship issues (38 percent), anxiety (36 percent), and anger management (30 percent) (Shekelle et al., 2011). In addition, a greater number of deployments common in OEF and OIF seem to be associated with women screening positive for mental health problems (Bean-Mayberry et al., 2011). Women also tend to prefer designated women's services and the co-location of primary care and mental health services, suggesting that the women's clinics that exist at many VA facilities help address these preferences (Kimerling et al., 2015). These preferences are stronger for many services among women veterans who are racial/ethnic minorities or sexual minorities. Women veterans who feel their veteran status is a central part of their identity are more likely to choose the VA for their health care (Di Leone et al., 2016).

Grossbard et al. (2013) used data from a large telephone survey ($N = 27,471$, 2.2 percent of which were veterans) to evaluate the relationship between veteran status and health indicators among men and women. Their analysis showed that women veterans were more likely than their male counterparts to have insurance, have a regular provider, and have had a routine checkup in the previous year. They were, however, more than twice as likely to report an anxiety disorder as male veterans (Grossbard et al., 2013), which is similar to the gender distribution of anxiety disorders in the civilian population.

Women Veterans' Use of Mental Health Services

Maguen et al. (2012) conducted a retrospective study of gender differences in VA health care use in a national sample of newly returning OEF and OIF veterans with PTSD seeking care from 2001 to 2010. The study population consisted of 159,705 OEF and OIF veterans (15,303 women, 144,402 men) who had at least one clinical VA facility visit from 2001 through 2010 and who were diagnosed with PTSD. The mean numbers of visits for each type of use (three mental health outpatient visits per year) were similar for men and women with PTSD. There were a few small but statistically significant differences between men and women in initiating care and in the types of service they received. Women with PTSD initiating care were less likely than male veterans with PTSD to receive inpatient mental health hospitalization, more likely to use outpatient mental health services, more likely to use primary care, and more likely to use emergency care. These findings are consistent with research on women in the general (nonmilitary) population which shows that women use primary care and emergency services at higher rates than men (Bertakis et al., 2000).

Fox et al. (2015) evaluated how attitudes toward mental health conditions, treatment, and VA care affected VA service use among men and women OEF/OIF veterans with probable PTSD, depression, or alcohol abuse. Men and women had similar perceptions of VA care and of their fit¹ within the VA health system. However, men viewed mental health treatment, treatment seeking, and mental health disorders more negatively than women and were more concerned about mental health–related stigma from loved ones than women. All these differences, while significant, showed small effect sizes. The authors also found that for women, positive perceptions of VA care were associated with a greater use of VA services. The authors caution, however, that it could be the use of VA services itself that increases positive perceptions of VA care (i.e., the positive view of VA services may be a result rather than a cause of the increased use of the services) (Fox et al., 2015).

Usage Barriers

Washington et al. (2006) conducted a study to identify the factors influencing women's use of VA health care services. The most often cited reasons for VA use were affordability (67.9 percent), the availability of a women's health clinic (58.8 percent), the quality of care (54.8 percent), and convenience (47.9 percent). The reasons for choosing non-VA care included having health insurance (71.0 percent), the greater convenience of non-VA care (66.9 percent), a lack of knowledge about VA eligibility and services (48.5 percent), and a perceived better quality of care outside of the VA health system (34.5 percent). Thus, a lack of information about VA health care, concerns about the quality of care provided by the VA, and inconvenience associated with using the VA reduced the use of VA health care among the study population.

Hamilton et al. (2013) examined reasons for attrition among women veterans who had previously sought health care from the VA health system. The data revealed that those who had left VA health care were in better health overall ($p < 0.007$) and had more resources to access health care in the private sector (private insurance, $p < 0.001$, and higher income, $p < 0.001$) than women veterans who remained in VA health care. Those who had left VA health care also had more negative perceptions of the VA and of the quality of the care they had received at the VA than those who had stayed in the VA health system ($p < 0.001$) (Hamilton et al., 2013).

The National Survey of Women Veterans, a national population-based telephone survey conducted in 2008–2009, also evaluated the use of VA health care. Of the 10,638 contacted households, 3,611 participants (33.9 percent) were eligible for and consented to enroll in the survey. Overall, 18.9 percent of that population had delayed or gone without needed health care in the prior 12 months, including 14.3 percent of insured and 54.6 percent of uninsured participants. Younger age was associated with delayed care or unmet need (35 percent of 18- to 34-year-olds). Women veterans with delayed care were more likely to be OEF and OIF veterans and were more likely to have experienced military sexual trauma (MST). In the study, 4.8 percent ($n = 173$) of the overall population sampled were OEF and OIF veterans, of which more than a third (37.2 percent) reported an unmet need for care. The most commonly cited reason for unmet needs was not being able to afford medical care. The independent predictors of delayed or unmet needs for OEF and OIF women veterans health care were being uninsured (OR = 6.5; 95% CI = 3.0–14.0) and being under 35 (OR = 4.5; 95% CI = 1.8–11.3). After controlling for potential confounders, the other predictors of delayed care were having a history of MST and the perception that VA providers are not gender sensitive (Shekelle et al., 2011).

¹ “Perceived fit” was measured using questions designed to assess participants' perceptions that they deserved VA care and questions designed to assess participants' perceived similarity to other VA users.

Lehavot et al. (2013) examined personal (not institutional) barriers to the use of care faced by women veterans with PTSD and depression with data from the National Survey of Women Veterans (N = 3,593); most of the veterans (80 percent) in that population were from the pre-OEF/OIF era. The authors evaluated unmet medical needs in the previous year, the reasons for unmet needs, and the barriers reported by women veterans who were not using VA health services. The authors compared these domains across four groups of women veterans: (1) those with a lifetime positive screen for PTSD, (2) those with current depressive symptoms, (3) those with both PTSD and depressive symptoms, and (4) those with neither PTSD nor depressive symptoms. Among the sample, 4 percent screened positive for depression and PTSD, 9 percent screened positive for PTSD only, 4 percent screened positive for depression only, and 83 percent did not screen positive for either PTSD or depression. Among the entire sample, 19 percent reported unmet medical needs in the past year. Among the different groups, adjusting for demographic differences, 46 percent of the PTSD-and-depression group reported unmet needs, compared with 25 percent of the PTSD-only group, 13 percent of the depression-only group, and 17 percent of the group without either diagnosis ($p < 0.05$). In terms of barriers to care among those with unmet medical needs, women were asked if the reasons for delaying or going without care were related to childcare responsibilities, work obligations, the affordability of care, transportation to care, or some other reason. The affordability of care was the most cited reason for delaying or going without care. It was also the only reason that differed significantly across the groups, with 69 percent of the PTSD-and-depression group citing this as a barrier to care compared with 42 percent in the PTSD-only group, 40 percent in the depression-only group, and 36 percent in the group with neither PTSD nor depression ($p < 0.05$). Not being able to take time off work was the second-most cited reason for not accessing care; there were no significant differences in that answer across the groups. Among the VA non-users and former users, over half of those in the PTSD-and-depression group (52 percent) and 34 percent of the PTSD-only group thought they were not eligible for VA health services. Similarly, only 3 percent of the PTSD-and-depression group and 4 percent of the PTSD-only group had insurance that covered care outside of the VA health system (Lehavot et al., 2013).

Survey Findings

Data from the committee's survey of veterans were analyzed to compare the reasons given for not using VA mental health care services by men versus women OEF/OIF/OND veterans who had mental health needs² but did not use mental health services (see Table 13-1). In general, the women and men veterans in this analysis were similar in their awareness of VA mental health benefits and how to apply for them, in feeling that they deserved to receive mental health care from the VA, in their trust of the VA, and in feeling welcome at the VA. One difference was that women were significantly less likely to report having had bad experiences at the VA than men (16.1 percent of women versus 24.4 percent of men). Another major difference appears to be that the women were significantly more likely to believe that they were not entitled to or eligible for VA mental health care (52 percent of women versus 34 percent of men).

The committee also analyzed data from its survey of veterans to assess the obstacles to using mental health care services reported by OEF/OIF/OND veterans who had mental health needs but did not use mental health services. No substantial differences were found between men and women veterans in this analysis.

²A veteran was classified as having a need for mental health care if the result on at least one mental health screener was positive, or reported receiving a mental health diagnosis from a health care provider in the past 24 months.

TABLE 13-1 Among Men and Women OEF/OIF/OND Veterans Who Have Mental Health Needs and Do Not Use Mental Health Services, the Percentage Who Agreed with Various Reasons for Not Using Services

	Men				Women			
	Unwgt n	Wgt N	Wgt %	SE %	Unwgt n	Wgt N	Wgt %	SE %
Need, no use	625	736,784			258	196,380		
You were not aware of VA mental health care benefits?	177	238,246	32.3%	1.8%	67	70,992	36.2%	4.2%
You do not know how to apply for VA mental health care benefits?	221	295,958	40.2%	1.8%	94	88,218	44.9%	4.1%
You do not feel you deserve to receive mental health care from the VA?	149	209,296	28.4%	1.5%	69	65,733	33.5%	3.4%
You do not believe you are entitled to or eligible for VA mental health care benefits?	174	251,186	34.1%	1.9%	92	102,503	52.2%	3.7%
You have had a bad prior experience at the VA?	167	179,521	24.4%	1.9%	58	31,690	16.1%	3.3%
You do not feel welcome at the VA?	125	146,108	19.8%	1.6%	46	33,301	17.0%	2.2%
You do not trust the VA?	203	232,716	31.6%	2.5%	67	46,393	23.6%	4.0%
You do not want assistance from the VA?	110	129,682	17.6%	1.5%	52	40,380	20.6%	3.7%
You use other sources of mental health care?	109	138,499	18.8%	2.0%	55	50,958	25.9%	3.5%
You do not need care?	237	292,598	39.7%	2.5%	74	63,661	32.4%	5.4%

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

Site Visit Findings

Site visit teams recognized during the first few visits that there was an under-representation of female veteran interviewees and subsequently intensified efforts to engage this population. Such efforts included outreach to women's veteran organizations, specific requests to VA staff and community-based organizations to recruit more women participants, and interviews with veterans at VA women's clinics. Just under 20 percent of the OEF/OIF/OND veterans interviewed were women (women represent about 21 percent of OEF/OIF/OND veterans overall). Findings from the interviews indicate that women face unique barriers to mental health care at the VA, largely related to challenges associated with being a woman in a traditionally male-dominated system as well as issues that are specific to MST, one of the main reasons women seek mental health care from the VA.

Female veterans reported frustration with both having to prove they are veterans (it is often assumed that a female at the VA is a wife accompanying her husband) as well as a *combat* veteran. One female veteran in Cleveland, Ohio, explained what she goes through each time she goes to a VA facility: "As far as mental health, I always have to identify myself as a veteran. I always have to have my card. . . . They assume I'm a spouse." Similarly, a veteran in Biloxi, Mississippi, relayed an interaction she had with an eligibility clerk: "I enrolled here for my healthcare and I had to educate the clerk. . . . I got put in as not a combat vet. I had to go back and say, 'No, I am a combat vet. I'm a girl, but I had boots on the ground in Afghanistan.' That's frustrating."

Women also reported feeling uncomfortable in VA health facility waiting rooms, which are often dominated by males. Many female veterans reported being "cat-called" while in VA facilities. Unwanted sexual attention can be particularly unsettling for female veterans who have been traumatized by MST.

As one VA clinician in Cleveland noted, “The last thing [female veterans] want to do is go to the clinic or the medical center and sit around in a waiting room with a bunch of people who look like potential perpetrators.” Another clinician in East Orange, New Jersey, said, “I think there are many, many people who fall through the cracks and don’t want to come here because they associate it with the very culture that traumatized them. That’s a huge barrier to treatment.” A female veteran in El Paso, Texas, even went as far as to say she was “afraid to go to [to a VA facility].”

Additionally, obtaining childcare in order to attend medical appointments is particularly difficult for women, who often bear the majority of or the sole responsibility for taking care of children. One promising practice that is helping to eliminate this barrier for women veterans is the creation of child-friendly spaces at some VA facilities.

Racial and Ethnic Minorities

In 2014 approximately 24.8 percent of post-9/11 veterans were minorities, and the proportion of minority veterans is projected to grow in the coming decades (VA, 2017b). About 23 percent of patients receiving outpatient PTSD care are black, 10 percent are Hispanic, and 15 percent identify themselves as another non-white race or ethnicity (IOM, 2014).

There is a paucity of literature on disparities in health care in racial and ethnic minorities in the OEF/OIF/OND populations. Furthermore, many of the studies that do look at racial disparities in health rely on secondary and administrative VA data, which are often missing race and ethnicity information (Long et al., 2006). Nevertheless, the committee summarizes the literature on the topic in this section and also includes some studies on all minority veterans from beyond the OEF/OIF/OND service era.

In a large study of veterans (N = 65,930) with a recent mental health or substance use diagnosis receiving care from patient-centered medical homes (PCMHs), Jones et al. (2016) looked at differences in experiences across race and ethnicity. Race and ethnicity were factors across all of the domains the researchers examined. For example, black, Hispanic, AI/AN, and A/PI veterans reported worse experiences than white veterans with respect to access to timely appointments to care. Interactions with office staff were worse for Hispanic, AI/AN, and A/PI veterans than for white veterans, indicating that these veterans may be at particular risk for poor interpersonal experiences while interacting with VA staff at their appointments. Black veterans reported more positive experiences with self-management support than did white veterans, suggesting that PCMH providers may be better engaging some minorities in that domain.

Hebert and Hernandez (2016) note that because the PCMH model improves outcomes and because minority veterans tend to have worse outcomes than non-minorities, minorities may have the most to gain from the PCMH model. That said, if the PCMH model is not adopted equally across the system and is adopted at a higher rate in clinics that serve non-minority veterans, the expansion of PCMHs could, in fact, increase disparities between minorities and non-minorities. In a study looking at the implementation patterns of PCMHs for minorities, Hernandez et al. (2016) found just that—facilities with higher percentages of minorities were associated with lower levels of PCMH implementation across the VA system.

In a study from the beginning of the OEF/OIF service era, Harada et al. (2002) found that minority veterans who strongly self-associate with their veteran status and had used outpatient services in the previous year (VA or non-VA) prefer using the VA health system for outpatient services more than those who do not strongly associate with their veteran status. Likewise, black and Hispanic veterans, the authors found, were more than twice as likely to prefer the VA health system to other systems of care compared to white veterans. Hynes et al. (2007) similarly found that black veterans were more likely to rely on VA health care than non-black veterans.

In contrast, in a separate study Washington et al. (2005) used the same dataset as Harada et al. (2002) but looked at actual usage patterns by race and ethnicity (rather than preferences among users as Harada et al. [2002] did). The study examined outpatient care usage among black, Hispanic, Asian/Pacific Islander, and white veterans (all male). Using survey data (3,227 completed interviews), the authors found that black veterans (OR = 0.5), Hispanic veterans (OR = 0.4), and Asian/Pacific Islander veterans (OR = 0.4) who were VA eligible were less than half as likely to have used VA outpatient services in the previous 12 months than white veterans. The most commonly cited barrier to VA usage among the ethnic minority groups was dissatisfaction with VA health care. The odds ratios for this complaint was significant among Hispanic (OR = 2.1) and Asian/Pacific Islander (OR = 5.8) participants, but not among black veterans (compared to whites). Furthermore, being white was a stronger predictor of VA health care use than was fair or poor health status (OR = 1.4) (Washington et al., 2005).

More recently, De Luca et al. (2016), in a telephone survey of both veterans and civilians, found that race and ethnicity were not associated with mental health treatment seeking (at the VA or elsewhere) among veterans. One study found that black and Hawaiian/Pacific Islander veterans were less likely to use mental health services than white veterans, but Latino veterans were not (Spoont et al., 2009).

In a review of the literature, Saha et al. (2007) found mixed results regarding racial and ethnic disparities in the use of VA mental health care. Race and ethnicity were related to the number of VA outpatient visits among veterans, with black and Latino veterans having more visits (reverse disparity) and Asian and Pacific Islanders having fewer visits (greater disparity) than non-Latino white veterans (Harada et al., 2002). Black, Latino, and Asian/Pacific Islander veterans were less likely than non-Latino white veterans to persist with health care services over a 12-month period (Washington et al., 2005), and non-white veterans were less active participants in their care, asked fewer questions, and in turn received less information from their providers. Finally, black and Latino veterans are more likely to use VA-only health services, while Asian/Pacific Islanders and non-Latino white veterans are more likely to seek help outside the VA health system (Washington et al., 2002).

Analysis of data from the committee's survey of veterans compared reasons for not using VA mental health care services among non-Hispanic white, non-Hispanic black, and Hispanic OEF/OIF/OND veterans who have mental health needs but do not use mental health services (see Table 13-2). Responses to the variables in Table 13-2 were similar among the groups, except that, compared to non-Hispanic white veterans, a higher percentage of both non-Hispanic black veterans and Hispanic veterans reported not feeling welcome at the VA as a reason for not using the VA. Also compared to non-Hispanic white veterans, a higher percentage of non-Hispanic black veterans indicated they were not aware of VA mental health care benefits and that they did not know how to apply for VA mental health care benefits were reasons for not using the VA. The committee also analyzed data from its survey of veterans to assess obstacles to using mental health care services reported by non-Hispanic white, non-Hispanic black, and Hispanic OEF/OIF/OND veterans who had mental health needs but reported they did not use any mental health services. No statistically significant differences were found among these groups of veterans in this analysis.

African American Veterans

Grubaugh et al. (2006) examined usage patterns among black and white veterans and found few racial differences in the use of VA mental health services. The study did reveal some differences between white and black veterans in terms of their past experiences, with black veterans in the sample having a higher rate of combat exposure, but the two groups did not differ in rates of PTSD diagnosis or severity. Black veterans were more likely to have a diagnosis of dysthymia (although the difference was not significant

TABLE 13-2 Among OEF/OIF/OND Veterans Who Have Mental Health Needs and Do Not Use Mental Health Services, the Percentage Who Agreed with Various Reasons for Not Using VA Services by Race/Ethnicity (selected races)

Reasons Veterans Do Not Use VA Mental Health Services	Non-Hispanic White Only			Non-Hispanic Black Only			Hispanic		
	Unwgt n	Wgt N	SE %	Unwgt n	Wgt N	SE %	Unwgt n	Wgt N	SE %
Total	729	792,537	-	174	157,266	-	146	159,142	-
Do not know how to apply for VA mental health care benefits	247	311,947	39.4%	75	75,340	47.9%	56	69,742	43.8%
Do not believe entitled or eligible for VA mental health care benefits	217	307,401	38.8%	55	56,121	35.7%	53	67,359	42.3%
Use other sources of mental health care	236	271,274	34.2%	45	39,510	25.1%	47	48,222	30.3%
Not aware VA offer mental health care benefits	174	227,887	28.8%	62	69,909	44.5%	44	57,858	36.4%
Do not need care	222	246,698	31.1%	41	44,534	28.3%	45	55,115	34.6%
Feel do not deserve to receive mental health care benefits from the VA	170	230,426	29.1%	41	39,802	25.3%	47	54,558	34.3%
Do not trust the VA	223	224,366	28.3%	52	44,528	28.3%	48	49,490	31.1%
Some other reason	192	194,731	24.6%	54	45,201	28.7%	49	44,498	28.0%
Had a bad prior experience at VA	176	170,298	21.5%	46	34,687	22.1%	45	42,278	26.6%
Do not feel welcome at the VA	122	121,315	15.3%	37	34,947	22.2%	40	41,672	26.2%
Do not want assistance from the VA	130	135,362	17.1%	30	26,157	16.6%	30	29,418	18.5%

NOTE: All response options and missing are included in the denominators of the percentages.

SOURCE: Committee to Evaluate VA Mental Health Services, Veteran Survey, 2017.

after adjusting for age) and of substance dependence or abuse (AOR = 2.48, CI = 1.04–5.92, $p = 0.04$). Black veterans were more likely to have used a substance abuse treatment center and to have made an urgent care visit than white veterans, but there were no racial differences in the likelihood of receiving VA benefits. Of the 84 veterans who were identified as having PTSD on the clinician-administered PTSD scale, only 30 had PTSD notated on their charts; there were, however, no significant age-adjusted or unadjusted racial differences found by the authors with this discrepancy. No additional racial differences were found regarding additional diagnoses, service use, or benefits (Grubaugh et al., 2006).

Murdoch et al. (2003) found that black veterans were less likely to be granted a service connection for PTSD than other veterans. Even after the authors adjusted for differences in veterans' PTSD severity, service characteristics, physical functioning, age, gender, education, medical comorbidities, combat exposure, and sexual assault status, the difference still held up—43 percent of black veterans in the study received a service-connected disability rating versus 56 percent of white veterans ($p = 0.003$). While the study surveyed veterans who applied for VA disability benefits between 1994 and 1998—pre-OEF/OIF service era—the results do suggest that black veterans, while they have similar rates of PTSD to white veterans (Grubaugh et al., 2006), may face more barriers to care than other veterans in the VA system.

In a qualitative study that included 49 African American veterans receiving mental health care from a VA facility, Eliacin et al. (2016) looked at patient perspectives on patient and provider barriers and on facilitators to engagement in VA mental health care. Patients suggested that providers should engage with patients and take their time to get to know them, particularly at the first meeting. Many stressed that if the provider is friendly, warm, and personal, it makes it easier for the participants to share their thoughts more openly. The veterans also identified some patient-related factors that help facilitate active engagement. These include self-awareness, assertiveness, willingness to seek help, and leadership skills. One participant said that his difficulty with self-awareness and willingness to seek help was associated with his African American identity and also with the general stigma associated with seeking mental health care in the African American community. The ability to identify personal emotions, behaviors, and thoughts and the ability to communicate them to providers were also identified as critical skills necessary to facilitating mental health treatment. Provider encouragement and ongoing reinforcement of these skills are essential, the participants stated.

Latino Veterans

In a review of the literature, Duke et al. (2011) looked for potential barriers to care among Latino veterans residing in rural locations. While Latino veterans report higher prevalence of PTSD and greater symptom severity than non-Hispanic Caucasians, they may avoid seeking VA medical care because of cultural norms among Latino families that value stoicism, downplay distress, and rely on family members to address problems. Rural-dwelling Latino veterans also face the logistical challenges that all rural-dwelling veterans face regarding unmet transportation needs and long travel distances to VA facilities. VA staff have reported that Latino veterans often have difficulty discussing personal matters. Latino veterans, on the other hand, have reported that the VA health system lacks the cultural competency to meet their needs, which may deter Latino veterans from seeking care (Duke et al., 2011).

A small study of Puerto Rican OEF and OIF veterans and family members following deployment examined unmet health needs. Hannold et al. (2011) found that Puerto Rican veterans tended to deny symptoms of stress and did not seek psychological examinations. The authors also found that the families of these veterans experienced emotional problems and expressed the need for family support groups. The veterans also indicated that they had physical problems and needed pain treatment. The authors concluded that there is a need for “veteran-centric” and family-focused health care.

Native American, Alaska Native Veterans

The Native American Indian, native Hawaiian, and Alaska Native (AIAN) populations serve at the highest per capita rates of any race or ethnicity in the Armed Forces (Holiday et al., 2006; Kramer et al., 2009); however, because of their relatively small absolute numbers, they make up less than 1 percent of veterans who served in OEF/OIF/OND (VA, 2012a). As of September 2012, there were 17,500 OEF/OIF/OND veterans who identified as AIAN (out of 2.4 million OEF/OIF/OND veterans overall). That said, nearly half of all Native veterans reside in rural locations on tribal or Alaska Native lands. According to the American Indian Vietnam Veterans Project, a community-based epidemiologic study, Native veterans have high rates of combat-related mental health disorders (31 percent current and 59 percent lifetime) and alcohol abuse and dependence (72 percent current, 84 percent lifetime). These figures are significantly higher than any other ethnic group (Beals et al., 2002). The rates of alcoholism, lifetime and current, are also higher than in civilian AIAN estimates (Brave Heart et al., 2016).

AIAN veterans have 1.9 higher odds of being uninsured than non-Latino white veterans (Johnson et al., 2010). They have a disproportionate amount of service-related military conditions, and they are more likely to use the Indian Health Service as opposed to the VA health system (Johnson et al., 2010; Kramer et al., 2009). A secondary data analysis of linked VA and Indian Health Service data ($n = 64,746$) found that 25 percent of AIAN veterans accessed care from both health systems; however, most used either the VA (28 percent) or the Indian Health Service (46 percent) exclusively. Among the users of both systems, most received their behavioral health care services from the VA and their primary care from the Indian Health Service (Kramer et al., 2009). The Indian Health Service, similar to the VA, has struggled historically to find and retain physicians, especially those who have the necessary cultural awareness (Brod et al., 1982; Fannin and Barnes, 2007; Hostetter and Felsen, 1975; Johnson and Cameron, 2001).

As with other rural veterans (described below), the AIAN population experiences significant barriers in accessing care, including underfunded resources (that is, time, money, and transportation), a lack of culturally appropriate care, difficulties in recruiting and retaining health care professionals where many AIAN reside, and geographic access issues (Kaufman et al., 2010). AIAN veterans are more likely than their white counterparts to report delays in care because of not getting a timely appointment or not being able to reach a contact by phone or because of transportation problems (Johnson et al., 2010). Despite the growing evidence on telehealth effectiveness, acceptance and implementation among providers in the rural areas where these veterans reside remain a challenge (Barton et al., 2007; Grigsby et al., 2007; Spaulding et al., 2005). However, a study examining AIAN veterans' acceptance of the administration of a mental health assessment by videoconference versus in person found that the veterans were comfortable with participating by videoconference (Shore et al., 2008). The veterans' level of patient satisfaction and cultural acceptance were similar in both the videoconference and in-person interview groups.

Brooks et al. (2015) examined demographic differences in VA service use among Native veterans (including AIAN) ($N = 84,269$) and compared them to a random sample of non-Native veterans ($N = 262,212$). Both groups used outpatient services more than their non-Native counterparts (both primary care and mental health). Both groups also had more overall diagnoses and higher disability ratings than the non-Natives in the study, suggesting that Native veterans have a greater need for services than non-Native veterans. Native women were more likely to report MST than non-Native women. Reported MST was associated with mental health service use.

Asian American and Pacific Islander Veterans

According to National Survey of Veterans data from 2010, 1.5 percent of veterans identified themselves as Asian American/Pacific Islander (AA/PI), up from 0.4 percent a decade prior. This

rate of growth reflects the AA/PI growth in the general population, which is projected to continue for decades to come (Tsai et al., 2014). Furthermore, AA/PI veterans were more likely to be OEF or OIF veterans than veterans of all other racial/ethnic groups. They also had higher incomes than both black and Hispanic veterans. The data revealed no differences in perceived barriers or stigma related to health care among AA/PI veterans compared to other veterans. After adjusting for differences in sociodemographic and health characteristics, AA/PI veterans used both VA and non-VA outpatient, inpatient, and emergency services at a rate equal to the rates of other racial/ethnic groups (Tsai et al., 2014). This is in contrast to an earlier review of the literature that found that AA/PI veterans, while physically healthier than other groups, reported worse mental health and also used services less than other groups (Tsai and Kong, 2012). When analyzed separately, there were some differences between AA and PI veterans, suggesting that perhaps they should not be lumped together by the VA or in future studies (Tsai et al., 2014). For example, AA veterans reported higher income, fewer PTSD symptoms, and better mental health overall than PI veterans. PI veterans were more likely to live in rural locations, to have been deployed, to report lower income, and to have higher PTSD checklist scores than AA veterans (Tsai et al., 2014).

Racial and Ethnic Differences among Women Veterans

In a review of the literature, Carter et al. (2016) looked for usage disparities among women veterans across racial and ethnic groups. The review was not mental health specific and included only two mental health–related studies. One of these studies found no difference across racial and ethnic groups among female veterans in the use of mental health services, although black women did report wanting mental health referrals more frequently than white women. The other mental health–related study included in the review reported that Native American women veterans were more likely than white women to receive treatment for alcohol use. Hispanic women and African American women received alcohol treatment from the VA health system at a rate level to that of white women.

Similarly, Koo et al. (2015b) compared usage by men and women by racial and ethnic group using a large sample ($N = 309,050$) of veterans who had received a mental health diagnosis and had used primary or mental health outpatient care between 2001 and 2012. Black women and men used emergency services at a higher rate than their white counterparts, while Asian/Pacific Islander men and women veterans used emergency services at a lower rate than white veterans. Hispanic women and men used primary care more than white women and men. American Indian women and Hispanic women veterans were both less likely to use outpatient mental health services than white veterans, whereas American Indian and Hispanic men were both more likely to use outpatient mental health care than white veterans. While black men were more likely to use mental health outpatient services than white men, usage did not differ significantly between black and white women.

Davis et al. (2014) examined gender and ethnic differences in VA mental health service use among OEF/OIF veterans diagnosed with depression. The authors used data from the VA Computerized Patient Record System ($N = 1,556$) to examine usage patterns for the 90 days following a depression diagnosis. Analysis revealed no gender or ethnic differences in the use of specialty mental health services following diagnosis. The authors noted that while these results are promising in that they suggest service use is equitable across gender and ethnicity, the data were drawn from a single VA network and participants were limited only to those with a depression diagnosis. Nevertheless, these results were similar to an earlier study that found no difference in use by race or ethnicity among women veterans (Grubaugh et al., 2008).

Lesbian, Gay, Bisexual, and Transgender Veterans

In 2012 the VA established an LGBT Health Program within the Office of Patient Care Services, led by two clinical psychologists and LGBT health care subject-matter experts (VA, 2017c). The program has led a series of activities that have led to recommendations for the VA to create a more welcoming environment for LGBT veterans, such as installing increased signage communicating LGBT awareness and sensitivity, providing LGBT resource information in waiting areas, and offering training webinars for providers regarding gender dysphoria and hormone evaluation. The VA has also created postdoctoral interprofessional psychology fellowships in LGBT health, and about half of those fellows accept VA positions upon graduation. Furthermore, since 2016 each facility has had a part-time LGBT care coordinator to assess the clinical needs of LGBT veterans at that facility and to address any gaps in the care of those veterans. Each Veterans Integrated Service Network (VISN) also has an LGBT lead. The LGBT care coordinator is tasked with creating a welcoming environment for LGBT veterans (VA, 2017c).

Data from the 2000 Census indicate that nearly 1 million veterans have same-sex partners (Gates, 2004), yet little is known about LGBT veterans' usage of and barriers to VA care. A recent study evaluating the usage of VA health services by LGB veterans (transgender veterans were not included in the study) and the barriers they experience while accessing those services found that 45.8 percent of participants reported lifetime VA usage, and 28.7 percent reported having used the VA in the previous year. For mental health services, 6.2 percent reported usage in the previous 12 months (Simpson et al., 2013). By comparison, between October 2001 and March 2015, approximately 61 percent of OEF/OIF/OND veterans obtained some sort of health care (not just mental health care) at the VA (VA, 2015a), and in fiscal year 2014 about 30 percent of the total veteran population used the VA (Bagalman, 2014). Lifetime use was predicted by a positive service connection, a positive screen for both PTSD and depression, and a history of at least one interpersonal trauma during military service related to the veteran's LGB status. Past-year use was predicted by female gender, positive service connection, positive screen for PTSD and depression, lower physical functioning, a history of at least one military interpersonal trauma during military service related to LGB status, and having no history of stressful experiences initiated by the military regarding LGB status. Nearly 75 percent of those who reported never seeking services from the VA said that they had other health insurance (Simpson et al., 2013).

Nearly one in eight respondents (11.8 percent) reported not using the VA because of concerns that the VA staff would not accept their sexual orientation. A smaller proportion (6.4 percent) reported concerns that other patients would not accept their sexual orientation as a reason for not using the VA. Over one-third of respondents (36.9 percent) who used the VA reported that their VA providers do not have knowledge of their sexuality. Almost one-third (32.8 percent) of respondents reported they sometimes or openly talk about their sexuality with VA staff (Simpson et al., 2013).

In 2011 a VA directive mandated medically necessary care for transgender veterans for the first time. The directive was updated in 2013 (VA, 2013). Interestingly, the directive positions the VA to provide care to transgendered veterans that is generally not covered by most private insurance providers (Johnson et al., 2016). The committee is aware of little research on this population and the barriers they may face seeking VA health care. The committee did find one study that evaluated VA data and found that between 2006 and 2013, 2,662 unique individuals had an *International Classification of Diseases, Ninth Revision (ICD-9)* code in their medical record related to transgender status (Kauth et al., 2014). Nearly 40 percent of the transgender diagnoses between 2006 and 2013 occurred in the 2 years following the 2011 VA directive, suggesting that the directive was effective in increasing access to care for transgendered veterans (Kauth et al., 2014).

In another study of transgender veterans, Brown and Jones (2016) sought to determine diagnostic disparities between transgendered veterans and veterans without an indication of transgender status on their health records. Transgender status was determined by *ICD-9* codes in patient electronic health records. All records with eligible codes between 1996 and 2013 were included in the study ($N = 5,135$). The authors noted that this is a crude estimation of the size of transgender veteran population that uses VA services since gender-identity data are not collected by the VA, making it impossible to include veterans who self-identify as transgender but have not received a transgender-related diagnosis. The prevalences of a variety of diagnoses were compared between the transgender group and a matched group of non-transgendered veterans ($N = 15,405$). After adjusting for marital status, religious affiliation, and priority group, transgendered veterans were found to be more likely to be diagnosed with all behavioral health conditions included in the analysis. These included depression, PTSD, serious mental illness, suicidal ideation/attempt, alcohol abuse, and tobacco use. Moreover, transgendered veterans were more likely than non-transgendered veterans in the study to have ever experienced homelessness or experienced MST and more likely to have a service-connected disability. Use of and barriers to care were not evaluated in the study.

Veterans' Access to Military Sexual Trauma Services

Recognizing the prevalence of military sexual trauma, VAMCs have a dedicated military sexual trauma coordinator, although the adequacy of MST services varies by facility (IOM, 2014). In cases of MST, facilities are strongly encouraged (but not required) to offer care from a provider that is the same gender as the veteran (or an opposite sex provider if a same-sex perpetrator committed the trauma) (VA, 2015c).

Military sexual trauma is a well-documented risk factor for PTSD, depression, and substance abuse in women and men (Kimerling et al., 2011; Suris and Lind, 2008). MST is reported in the VA based on a universal screening program—the VA requires all facilities to screen for MST and to provide services (even if the veteran is not eligible for other services) (VA, 2012b). In 2003, shortly after the implementation of VA screening, 21.5 percent of women and 1.1 percent of men reported having experienced MST (Kimerling et al., 2007). These estimates have remained fairly consistent, and as of 2008 those percentages translated into 48,106 women and 43,693 men screening positive for MST (Hyun et al., 2009). Department of Defense (DoD) estimates of MST report that as of 2008, the annual prevalence of being a victim of sexual assault was 6.8 percent among women and 1.8 percent among men (Lipari et al., 2008). A study of reservists examined sexual harassment and assault during military service and found that sexual assault was reported by 13.1 percent of the women and 1.6 percent of the men (Street et al., 2008).

There are mixed findings regarding the relationship between women's health care use and sexual assault. Kelly et al. (2008) found MST to be associated with a greater use of VA care but less satisfaction with VA services. Another study found that women with a history of any form of sexual assault were more likely to meet the criteria for PTSD but accessed fewer health care services (Suris et al., 2004). After controlling for symptom severity, Di Leone et al. (2013) found that women who had experienced sexual harassment during deployment used VA mental health services at a greater rate than women who did not report having experienced sexual harassment. Another study found that women veterans who had experienced MST used VA mental health services at a higher rate than women who had not (27.6 versus 7.1 percent, $p < 0.001$) but that the difference was not significant after controlling for PTSD and depression symptoms (Calhoun et al., 2016). Women veterans who have experienced MST and who access health care report significant anxiety if treated by a male provider, particularly if subjected to an invasive exam, a concern with regard to aggravating mental health symptoms and accessing future health care (Bean-Mayberry et al., 2010).

Homeless Veterans

In 2014, in a point-in-time count, the Department of Housing and Urban Development (HUD) estimated there were 49,933 homeless veterans (10 percent of the total homeless population). This number has dropped substantially since 2009, when there were an estimated 74,050 homeless veterans. Of the homeless veterans in 2014, 64 percent were sleeping in a shelter while 36 percent were in a place not meant for human habitation (Perl, 2014). Many of these veterans receive VA benefits and health services from VA facilities. Homelessness is associated with increased morbidity and mortality compared with housed individuals, and many homeless often defer or delay treatment which may complicate their health needs. Homeless individuals often receive their care from emergency departments, and thus they often do not receive chronic care management or preventative services (O'Toole et al., 2013).

The HUD-VA Supportive Housing (HUD-VASH) program began in 1992 as a joint effort by the VA and HUD to address rising homelessness among veterans. The program offers housing choice rental vouchers and supportive housing services to help veterans remain stably housed. Disproportionately from the Vietnam era, homeless veterans were likely to be male, of older age, and to have multiple comorbidities (mental, physical, substance abuse) that made support services an essential component of the program (Tsai and Rosenheck, 2015).

The HUD-VASH program underwent a dramatic change in 2009 as veteran homelessness became a national priority and as veterans from the Afghanistan/Iraq wars were returning home to a troubled U.S. economy. Embracing the “housing first” approach, the program energetically made outreach to chronically homeless veterans, offering them ready access to housing without pre-conditions such as sobriety or medication compliance. With strong popular support from political leaders in all 50 states, Congress had authorized over 90,000 rental vouchers and \$635 million for the program as of 2016 (U.S. Interagency Council on Homelessness, 2017).

Nevertheless, early adoption was challenging for many VA facilities, since the housing-first approach required VA clinicians to make substantial changes in their practice, including prioritizing home visits and harm reduction rather than abstinence requirements. Locating and furnishing apartments was also a novel challenge, and additional funds had to be appropriated to support these program components and hire additional case managers to assist in implementing them.

Considered the nation's largest permanent housing initiative, HUD-VASH has proven to be a success in engaging and stably housing homeless veterans and their families. Overall numbers of homeless veterans have dropped by 56 percent since 2009, and as this is written, three states (Delaware, Virginia, and Connecticut) and 35 cities have announced an end to veteran homelessness in their jurisdictions (U.S. Interagency Council on Homelessness, 2017).

Compared to previous cohorts, veterans who served in OEF/OIF/OND operations are more likely to be younger, female, and a head of household. While still a minority of homeless veterans overall, OEF/OIF/OND veterans are likely to experience a rise in homelessness if HUD-VASH and other programs cannot accommodate their needs (which also include dealing with higher rates of MST and traumatic brain injury). Supportive Services for Veterans' Families (SSVF) is a program begun in 2012 that is designed to prevent or intervene early in homelessness by providing short-term financial assistance to pay rent arrears or other expenses that threaten a veteran family with eviction. Early findings from evaluations of SSVF indicate that almost 100,000 persons have been assisted at an average household cost of \$2,480 (Byrne et al., 2014).

O'Toole et al. (2013) compared service use over 6 months among newly enrolled homeless veterans (N = 127) and housed veterans (N = 106) in the medical home model. The groups were comparable in age and almost all had a chronic medical condition (92.1 percent of homeless veterans versus 96.2 percent of non-homeless veterans). The two groups also had similar proportions of mental health diag-

noses (59.1 percent of homeless veterans versus 52.8 percent of non-homeless veterans). Depression, anxiety disorder, PTSD, and bipolar were the most common conditions in both groups. Over 88 percent of homeless veterans used mental health services during the first 6 months of enrollment (averaging 12 visits per person), over 86 percent accessed specialty care, and over 37 percent accessed substance abuse treatment. Less than half of the cohort (48 percent) visited the emergency room during the 6-month period. Non-homeless veterans used all services at a lower rate than homeless veterans except for specialty services, which non-homeless and homeless veterans used nearly equally. Among the homeless group, 26 percent stopped going to the emergency room after 3 months of primary care enrollment. The higher use of services among the homeless group suggests that homelessness is a barrier to care in that the homeless veterans in this cohort were more likely to delay or defer the treatment of both medical and mental health conditions than the housed veterans (O’Toole et al., 2013).

In a study comparing patient experiences across three models of care—non-VA primary care tailored for homeless patients, VA primary care tailored for homeless patients, and typical VA care—Kertesz et al. (2013) found that recently or currently homeless veterans preferred the non-VA services tailored to homeless patients over the other modes of care. Using a survey to measure recently and currently homeless veterans’ satisfaction with services, the researchers found the mean score at the tailored non-VA site to be greater than those at the three VA sites. The VA sites had 1.5 to 3 times greater odds than the non-VA sites of an unfavorable experience in the domains of patient–clinician relationship, cooperation, and access (Kertesz et al., 2013).

McGuire et al. (2009) evaluated access, use, and outcomes among homeless veterans receiving either integrated VA health care (homeless, primary care, and mental health care) or “usual” VA health care. The veterans in the study either had a serious mental illness or were substance abusers. Veterans in both groups were comparable in levels of social, psychiatric, and medical problems (N = 130 in both groups). Over the 18-month study, veterans in the integrated group received primary care appointments more quickly than the veterans in the standard care group. Similarly, they completed more primary care visits, received more preventative services, and made fewer emergency room visits. Despite the veterans in the integrated care group receiving more timely and frequent services, there was no difference in perceived health status between the two groups (McGuire et al., 2009).

During the site visits conducted as part of this study, the site visitors witnessed firsthand the success of the HUD-VASH program. They reached out to locations serving extremely low-income veterans, such as food banks and homeless shelters, and discovered that the veterans served in these locations were generally well connected with VA health services. Compared to their non-veteran counterparts, homeless veterans had far readier access to housing and services (rental vouchers being very difficult to obtain in the general population). Referring veterans to the VA services was a means of conserving scarce county or state resources targeted for homeless services. As one VA staff member said:

When a non-VA agency finds out someone’s a veteran, they almost burn the doors down trying to get the person into the VA . . . especially agencies that maybe survive on grants or United Way money. . . . It’s like, “Let’s get them to somebody that’s got the big pockets.” [Iowa City, Iowa]

Outreach workers are quick to make the appropriate referrals:

If they’re . . . homeless, it would be very hard for them not to interact with us because as soon as they went to any social service organization, they would say, “Oh, you’re a veteran?” Someone would probably literally come and connect with that person, if not that day, within a few days. [San Diego, California]

THE DEPARTMENT OF VETERANS AFFAIRS OFFICE OF HEALTH CARE EQUITY

The VA's Office of Health Equity (OHE) was established in 2012 and is charged with building cultural and military competence within the VA in order to eliminate health disparities (Commission on Care, 2016). OHE has successfully identified new areas of health care disparities among veterans and works with veterans groups and other VA entities, such as the Office of Diversity and Inclusion, to achieve its mission. In 2013, with a variety of stakeholders, the OHE developed the Health Equity Action Plan (HEAP) to ensure that veterans receive equitable health care irrespective of geography, gender, race, age, culture, or sexual orientation. HEAP focuses on awareness, leadership, health system and life experience, cultural and linguistic competency, and data in order to implement its mission (VA, 2015d).

In its recent assessment of the VA system, the Commission on Care asserted that the VA had not provided adequate resources or authority for OHE to achieve its mission and implement HEAP in full (Commission on Care, 2016). OHE lacks the adequate staff, resources, and support to effectively address issues of equity within the VA. Further compounding the challenges the OHE faces, the Commission on Care noted, the VA lacks high-quality data on vulnerable populations and health outcomes and lacks data on the impact of existing health equity initiatives. The Commission on Care recommended that the VA make health equity a strategic priority by directing the implementation of HEAP nationwide and designating an equity "clinical champion" within each VISN and VAMC. It also recommended fully staffing OHE and fully monitoring and evaluating the implementation of HEAP (Commission on Care, 2016).

In communications with the committee, the VA highlighted activities and research that OHE has completed in order to better understand mental health disparities. But the VA also acknowledged the Commission on Care findings and many of the challenges that OHE continues to face (VA, 2017a). Namely, the VA acknowledged that HEAP has not yet been fully implemented despite the Commission on Care recommendation. Furthermore, it reported that VA data are not reliably broken down by race and ethnicity despite OHE's continued advocacy for that action. OHE has demonstrated how to reduce missing race and ethnicity data in specific instances. Finally, VA acknowledged that OHE continues to be understaffed, with only two full-time equivalent staff as of May 31, 2017 (VA, 2017a).

STIGMA

In the context of this report, *stigma* refers to the discrimination veterans might face from friends, family, employers, and others because of their mental health needs or treatment-seeking behavior. Stigma can be an actual or perceived barrier in that veterans may fear discrimination associated with their mental health and treatment-seeking behavior which may or may not actually materialize. Stigma is a sociocultural barrier affecting access; for example, if a health system user or (potential user) perceives or experiences discrimination from a provider or from the public, it may discourage the user from seeking services. While there are numerous studies that document stigma associated with mental health and with the use of mental health care in active-duty military populations (IOM, 2013), there is far less in the literature about stigma and how it affects veterans who have separated and are using or are eligible for VA mental health services. This section is a summary of the sparse literature on the topic.

Despite efforts reduce stigma in recent years, it is well documented that there is a strong stigma attached to seeking mental health care in the military (Acosta et al., 2014; Brown and Bruce, 2016; Hurtado et al., 2015; Kim et al., 2016; VanSickle et al., 2016) and veterans often carry this belief with them following separation (Chase et al., 2016; Kulesza et al., 2015). In the site visit interviews, veterans reported stigma associated with seeking medical care, particularly for mental health issues, that is a carryover from active duty. Veterans across all branches reported that while serving, not only were they

discouraged from reporting medical issues, but any behaviors were severely chastised that demonstrated weakness or not “sucking it up and driving on” [West Haven, Connecticut]. This was particularly true with respect to mental health concerns.

The term “malingerer” gets thrown around a lot. To be the person that’s always going to medical or whatever for issues . . . you may get barred from the next operation . . . because then they’re like, “Oh. Well, you had been to medical prior for this and this and this. . . . We may have to replace you with somebody else.” [Iowa City, Iowa]

The military experience also taught veterans that reporting mental health concerns could end their careers. A provider who was an OEF/OIF/OND veteran offered this perspective:

The problem, it starts out within the military. There’s a huge stigma about mental health. If a soldier or service member goes to a mental health facility, then it’s almost like a career killer. A lot of veterans won’t report a lot of the symptoms . . . until they get to a point where they can’t control it. [Topeka, Kansas]

While stigma associated with mental health is also well documented in the civilian world (Corrigan et al., 2014), veterans may face levels of stigma not experienced by the civilian population. These stem from negative attitudes about seeking help in general, privacy concerns, an emphasis on “toughness” and self-reliance, and the belief that they will not be helped. Many veterans reported that even after they left active duty, they still had a hard time believing they could identify mental health concerns and not experience backlash. VA staff also identified this as a significant barrier. One clinician noted,

The tendency [in the military] was push down the emotions, push down the thoughts, just get on with it because they didn’t want to abandon their brothers. Now when they come back . . . I think a lot of the problem we have is getting them to come in. [Biloxi, Mississippi]

A 2015 study by Kulesza et al. (2015) looked at the association between treatment-seeking stigma and the use of mental health services among a sample of 812 young veterans. The 812 participants who were included in the analysis averaged 28.26 years old. The authors found that those veterans who associated seeking care with greater levels of public stigma were less likely to take part in mental health treatments. Another particularly notable finding was that nearly half (44 percent) of the participants perceived that they would be negatively judged by others for seeking mental health care but only 12 percent reported they themselves would view others negatively for seeking treatment (whether they needed treatment themselves or not). This discrepancy is an example of how perception among veterans may not align with the reality—veterans may have a fear of being judged negatively by their peers for seeking mental health care when in fact very few veterans in this study viewed treatment seekers as weak or inferior for seeking care (Kulesza et al., 2015).

Brown and Bruce (2016) looked at how self-stigma, public stigma, and concerns about career-related consequences were related to treatment-seeking among OEF/OIF/OND soldiers and veterans. The authors surveyed 276 participants, 62 percent of whom were veterans and 38 percent of whom were active duty. Interestingly, the analysis differentiates stigma (negative beliefs about mental illness) from career worry and found that while some OEF/OIF/OND soldiers and veterans may not have negative beliefs about mental illness, they may avoid seeking care out of a fear that it could harm their careers. In fact, career worry was a stronger predictor of avoiding care than self-stigma or public stigma among the study population (Brown and Bruce, 2016).

In a 2011 review, Vogt looked at 15 studies of mental health beliefs and public stigma and how these factors affect the use of services among veterans and active-duty military. The author also sought to identify areas that have been neglected in the research that require additional attention. The review revealed

15 articles—12 quantitative and 3 qualitative—that focused on mental health–related beliefs or in which beliefs regarding mental health emerged from the data. Nearly all the quantitative papers found public stigma to be a barrier to care. While only two studies in the review addressed personal beliefs about mental health care as a barrier to care, those two showed that negative attitudes about seeking mental health care and the idea that individuals should be able to handle their own mental health were barriers to seeking mental health care. Vogt suggests that the topic of personal beliefs about mental health and mental health care should be studied further among military veteran populations. The current research on the topic is sparse, but it does suggest these are important factors affected health-seeking decisions (Vogt, 2011).

A small qualitative study of 16 OEF/OIF veterans receiving care for PTSD reported similar results (Mittal et al., 2013). All the participants reported that they were aware of stigmatizing labels for PTSD. Being “violent” or “dangerous” was perceived by participants to be the dominant stigmatizing stereotype for the condition. Being “crazy” was another stereotype that participants felt was common, particularly within their families. Only a few of the participants, however, self-stigmatized and felt that the PTSD stereotypes applied to themselves. However, these labels and the fear of being labeled did affect treatment seeking among the sample: several participants reported they avoided treatment for fear of being labeled with a negative stereotype. Of those who avoided treatment, most chose to cope with their symptoms on their own and, in some cases, with substance abuse. Many participants expressed that others with PTSD were the only people that truly understood their experience, suggesting to the authors that group therapy or peer counseling may be a good way to combat the effects of public stigma and reduce the incidence of self-stigma (Mittal et al., 2013).

In another study, Pyne et al. (2004) evaluated the relationship between perceptions of stigma and depression severity and treatment for depression. The authors used a convenience sample of depressed veterans from a VA outpatient clinic ($n = 54$) and never-depressed veterans from a VA primary care clinic ($n = 50$). The sample was not OEF/OIF/OND specific. The authors found that among those in treatment for depression, symptom severity was a strong predictor of perceived stigma. Subthreshold depression, however, was not a predictor of perceived stigma.

Rosen et al. (2011) evaluated a similar question among a sample of veterans with a PTSD diagnosis. The authors examined the relationships among symptom severity, stigma, and service use. The study sample included a total of 1,609 male and female veterans with a PTSD diagnosis, 482 of whom agreed and were eligible to participate (31 percent response rate). Of the sample, 243 were OEF/OIF veterans. About one-third (35 percent) of the sample said that stigma concerns were “moderately” or “very much” reasons to not seek care. However, contrary to the other research discussed in this section, persons who expressed stigma concerns were no less likely to actually initiate psychotherapy or counseling. While there was a low response rate among OEF/OIF veterans in the study, they were no less likely to initiate care than veterans from other service eras. The authors noted that the low response rate overall raises some concerns about selection bias and suggested that the veterans they initially contacted who were most concerned about stigma may have declined to participate.

National Guard and Reservists are in the unique position in that they may be eligible to use VA services while still serving in the armed forces. Stigma is an often-cited barrier to seeking mental health care by National Guard members, particularly because they are often worried their mental health service utilization will appear on their military records if they are still actively serving (Gorman et al., 2011). A 2015 literature review showed, however, that National Guard and Reservists tend to report lower rates of stigma related to seeking mental health care than their active-duty counterparts (Sharp et al., 2015). The National Guard and Reservists in the studies reviewed sought care at the VA, DoD, and community facilities. The committee is not aware of research that looks at stigma among National Guard and reservists who seek care at the VA specifically.

Pietrzak et al. (2009), however, evaluated how mental health and beliefs about mental health care were related to stigma, barriers, and mental health care use among a sample of 272 OEF/OIF National Guard, Reserve, and active-duty veterans. The authors screened participants for mental health problems using the PTSD Checklist–Military, the Patient Health Questionnaire-9 (for depression), and the CAGE questionnaire (for substance use). Stigma and barriers to care were measured using the Perceived Stigma and Barriers to Care for Psychological Problems, an 11-item instrument that assesses stigma and obstacles that prevent or discourage individuals from seeking mental health care. Not surprisingly, negative beliefs about mental health care, such as “Therapy is not effective for most people” and “Therapy is a sign of weakness,” were significant predictors of stigma and barriers to care. Negative beliefs were also associated with the decreased use of mental health counseling and medication in the previous 6 months. The presence of a disorder was also associated with stigma and barriers to care. The stigma and perceived barriers items that had the strongest association with a positive screen for a psychiatric disorder were embarrassment, being perceived as weak, not knowing where to get help, and having trouble scheduling an appointment. The authors surmised that those with mental health disorders may perceive more barriers because they have a more difficult time navigating the VA system. The results of this study confirm those of an earlier look at the topic (Hoge et al., 2004) which demonstrated a similar association between a positive screen for a psychiatric disorder and greater reported stigma and barriers to care among OEF/OIF veterans.

REDUCING STIGMA

Veterans with mental health conditions often encounter or perceive stigma that may affect their use of mental health services. They also may experience self-stigma, where an individual internalizes stigmatizing beliefs about mental illness which may, in turn, discourage the use of mental health care (Lucksted et al., 2011). A 2012 review of interventions designed to combat self-stigma revealed that such interventions tend to follow one of two approaches (Mittal et al., 2012). Interventions that follow the first approach focus on the beliefs and attitudes of the self-stigmatizing individual. The other common approach focuses on improving coping with self-stigma by improving self-esteem, empowerment, and treatment-seeking behavior. The authors of the review noted that most of the 14 studies included were pilot programs or exploratory investigations with limitations (e.g., small sample sizes, no control group, no randomization). Furthermore, none of the studies controlled for mediating effects such as symptom severity. Most of the study populations were individuals with schizophrenia or depression, and only one study was veteran focused. The authors noted that while the field is emerging, many interventions reviewed were not based on a theoretical framework and lacked clear definitions of self-stigma and clear measurement tools (Mittal et al., 2012).

A more recent review looked at six intervention approaches to reduce self-stigma and found several common elements in emerging self-stigma interventions (Yanos et al., 2015). The review included three self-stigma treatment approaches that were not covered in the Mittal et al. (2012) study discussed above. Psychoeducation was common in all interventions, many of the interventions included cognitive techniques and offered opportunities to practice skills to combat stigmatizing thoughts and beliefs, narration was a key element in many interventions to help individuals make sense of past experiences and empower them to be active agents within their lives, and nearly all the interventions offered tools designed to encourage feelings of hope, empowerment, and motivation to achieve one’s goals. The authors noted that while many of the interventions shared common features, they were all unique in their emphasis and development and were best suited for certain people in different contexts. For example, some interventions were designed to be implemented in a group setting (Ending Self Stigma, Narrative Enhancement, and Cognitive Therapy) while others were designed for a peer-support setting (Coming Out Proud, Anti-Stigma Photovoice). Outcome research of many of the interventions is emerging, and

what has been completed shows positive results. More rigorous evaluation is needed and is under way for several interventions (Yanos et al., 2015).

An adaptation of the Coming Out Proud program called Honest, Open, Proud is currently in use at the VA (VA, 2017c). Master trainers will train peer specialists to use the intervention with veterans they work with. The intervention is designed to reduce self-stigma, thereby reducing that barrier to seeking and continuing treatment. However, a randomized trial of Coming Out Proud found (among a non-veteran sample) that the intervention had no significant effect on self-stigma. It did, however, have a positive effect on disclosure-related stress, on the perceived benefits of disclosure, and on secrecy (Rusch et al., 2014).

One intervention included in the Yanos et al. (2015) review was called Ending Self Stigma, which may have greater application in the VA system (Lucksted et al., 2011). The intervention consists of nine weekly 90-minute sessions that are a combination of lecture, group sharing of experiences, problem solving, and other discussion. Participants are assigned work to complete between sessions. In the evaluation, 34 participants completed the full intervention. Using the Internalized Stigma of Mental Illness (Ritsher et al., 2003) to measure self-stigma pre- and post-intervention, the analysis found that 32 percent of participants scored above 2.5 after the intervention, compared with 47 percent at baseline, indicating a decrease in self-stigma among the participants. The authors noted that a larger study (with a control group) is needed, but the results of this intervention to reduce self-stigma are promising (Lucksted et al., 2011).

Similarly, Stecker et al. (2011) piloted a cognitive behavioral therapy (CBT) intervention designed to reduce mental health stigma among a sample of 27 OEF/OIF National Guard veterans with mental health needs (there was no control group). The intervention was a single one-on-one CBT session that focused on individual beliefs about mental health treatment. The session lasted 45–60 minutes. While beliefs about seeking mental health treatment did not change significantly post-intervention, at a 1-month follow-up, or at a 3-month follow-up, the intention to seek treatment did increase significantly following the intervention. That said, while participants reported that they intended to seek treatment, service use did not actually go up. The authors suggested that a longer follow-up period may be needed to see a change in service use. They also noted that the change in intention to seek behavior may be attributed to a change in symptoms post-intervention, which the authors did not assess. The authors noted that interventions designed to increase treatment initiation are greatly needed, but a larger study with a control group will be necessary to assess the effectiveness of this intervention (Stecker et al., 2011).

SUMMARY

This chapter outlined studies from the literature that examined racial and ethnic disparities in mental health diagnosis and treatment provided by the VA and in adherence to care among veterans as well as addressing issues affecting women veterans. It also described access and stigma issues faced by various select population groups and associated findings from this study's survey and site visits. A summary of the committee's findings on this topic is outlined below.

- Select population groups, including women, racial and ethnic minorities, and homeless veterans face unique barriers to care compared with male, white, and housed veterans.
- Women veterans are generally in better health than their male counterparts, and they tend to seek care at a higher rate than men.
- The affordability of care was cited in several studies as a common barrier to seeking needed services.

- Women veterans were more likely than men to believe that they are not entitled to or eligible for VA mental health care.
- Compared to non-Hispanic white veterans, a higher percentage of non-Hispanic black veterans indicated that they did not use VA services because they were not aware of VA mental health care benefits and also that they did not know how to apply for VA mental health care benefits.
- Compared to non-Hispanic white veterans, a higher percentage of both non-Hispanic black and Hispanic veterans indicated that they did not use VA mental health services because they did not feel welcome at the VA.
- While the findings showed some variation, minority veterans may be less likely to use services and they may be more likely to report worse experiences obtaining services than white veterans.
- Minority veterans generally have fewer health care options outside of the VA than white veterans.
- Minority veterans report more difficulty accessing PCMH care, a care model that is being implemented at a higher rate in areas that serve predominantly non-minority veterans.
- The literature documents racial and ethnic differences in mental health diagnosis patterns among veterans. The reasons are not clear, but some researchers posit that the difference in diagnosis patterns may be related to provider characteristics, doctor–patient communication, patient participation, or the lack of cultural sensitivity of diagnostic criteria for mental health conditions.
- The literature shows the existence of disparities in treatment, with studies showing that compared to white veterans, non-white veterans are not as likely to receive pharmacotherapy treatment and are more likely to receive psychotherapy.
- Non-white veterans are less likely to be adherent to treatment.
- Although research is limited, LGB veterans may use VA mental health services at a lower rate than their non-LGB counterparts.
- The limited research on transgendered veterans suggests that they may be more likely to have a mental health diagnosis than their non-transgendered counterparts.
- Following a directive in 2011, the VA provides services to transgendered individuals that most private insurance does not cover.
- Research on homeless veterans shows they are more likely to defer or delay mental health care than housed veterans, but they also have a greater need for services.
- While the evidence base is sparse regarding stigma as a barrier to care among OEF/OIF/OND veterans, the available literature suggests that higher perceived stigma and concern about consequences that may result from seeking care is a barrier to seeking mental health services.
- Veterans with mental health disorders are, not surprisingly, more likely to perceive stigma, and a more severe disorder may predict more perceived stigma.
- Some research suggests that the perception of stigma may not align with the reality—that is, veterans may fear negative judgment from others for seeking care but may not in fact actually experience it.
- While the field is just now emerging, there are some promising interventions in place at the VA, such as “Ending Self Stigma,” to help reduce stigma among veterans.

REFERENCES

- Acosta, J. D., A. Becker, J. L. Cerully, M. P. Fisher, L. T. Martin, R. Vardavas, M. E. Slaughter, and T. L. Schell. 2014. *Mental health stigma in the military*. Santa Monica, CA: RAND Corporation.
- Asnaani, A., J. A. Richey, R. Dimaite, D. E. Hinton, and S. G. Hofmann. 2010. A cross-ethnic comparison of lifetime prevalence rates of anxiety disorders. *Journal of Nervous and Mental Disease* 198(8):551–555.

- Bagalman, E. 2014. *The number of veterans that use VA health care services: A fact sheet*. Washington, DC: Congressional Research Service.
- Barton, P. L., A. G. Brega, P. A. Devore, K. Mueller, M. J. Paulich, N. R. Floersch, G. K. Goodrich, S. G. Talkington, J. Bontrager, B. Grigsby, C. Hrinkevich, S. Neal, J. L. Loker, T. M. Araya, R. E. Bennett, N. Krohn, and J. Grigsby. 2007. Specialist physicians' knowledge and beliefs about telemedicine: A comparison of users and nonusers of the technology. *Telemedicine Journal and E Health* 13(5):487–499.
- Beals, J., S. M. Manson, J. H. Shore, M. Friedman, M. Ashcraft, J. A. Fairbank, and W. E. Schlenger. 2002. The prevalence of posttraumatic stress disorder among American Indian Vietnam veterans: Disparities and context. *Journal of Traumatic Stress* 15(2):89–97.
- Bean-Mayberry, B., C. Huang, F. Batuman, C. Goldzweig, D. L. Washington, E. M. Yano, and I. M. Miake-Lye. 2010. *Systematic review of women veterans health research 2004–2008*. Los Angeles, CA: Evidence-Based Synthesis Program (ESP) Center.
- Bean-Mayberry, B., E. M. Yano, D. L. Washington, C. Goldzweig, F. Batuman, C. Huang, I. Miake-Lye, and P. G. Shekelle. 2011. Systematic review of women veterans' health: Update on successes and gaps. *Womens Health Issues* 21(4 Suppl):S84–S97.
- Bertakis, K. D., R. Azari, L. J. Helms, E. J. Callahan, and J. A. Robbins. 2000. Gender differences in the utilization of health care services. *Journal of Family Practice* 49(2):147–152.
- Brave Heart, M. Y., R. Lewis-Fernandez, J. Beals, D. S. Hasin, L. Sugaya, S. Wang, B. F. Grant, and C. Blanco. 2016. Psychiatric disorders and mental health treatment in American Indians and Alaska natives: Results of the National Epidemiologic Survey on Alcohol and Related Conditions. *Social Psychiatry & Psychiatric Epidemiology* 51(7):1033–1046.
- Brod, R. L., P. A. May, and T. J. Stewart. 1982. Recruitment and retention of federal physicians on the Navajo reservation. *Social Science Journal* 19(4):47–66.
- Brooks, E., C. Kaufman, H. T. Nagamoto, N. K. Dailey, B. D. Bair, and J. Shore. 2015. The impact of demographic differences on Native veterans' outpatient service utilization. *Psychological Services* 12(2):134–140.
- Brown, G. R., and K. T. Jones. 2016. Mental health and medical health disparities in 5135 transgender veterans receiving healthcare in the Veterans Health Administration: A case-control study. *LGBT Health* 3(2):122–131.
- Brown, N. B., and S. E. Bruce. 2016. Stigma, career worry, and mental illness symptomatology: Factors influencing treatment-seeking for Operation Enduring Freedom and Operation Iraqi Freedom soldiers and veterans. *Psychological Trauma* 8(3):276–283.
- Byrne, T., D. Culhane, V. Kane, J. Kuhn, and D. Treglia. 2014. *Predictors of homelessness following exit from the supportive services for veteran families program*. Washington, DC: VA National Center on Homelessness Among Veterans.
- Calhoun, P. S., A. R. Schry, P. A. Dennis, H. R. Wagner, N. A. Kimbrel, L. A. Bastian, J. C. Beckham, H. Kudler, and K. Straits-Troster. 2016. The association between military sexual trauma and use of VA and non-VA health care services among female veterans with military service in Iraq or Afghanistan. *Journal of Interpersonal Violence*, January 21 [Epub ahead of print].
- Carter, A., S. Borrero, C. Wessel, D. L. Washington, B. Bean-Mayberry, and J. Corbelli. 2016. Racial and ethnic health care disparities among women in the Veterans Affairs healthcare system: A systematic review. *Womens Health Issues* 26(4):401–409.
- Chase, R. P., S. A. McMahon, and P. J. Winch. 2016. “Tell me what you don't remember”: Care-seeking facilitators and barriers in the decade following repetitive blast exposure among Army combat veterans. *Military Medicine* 181(2):116–122.
- Chermack, S. T., K. Zivin, M. Valenstein, M. Ilgen, K. L. Austin, J. Wryobeck, and F. C. Blow. 2008. The prevalence and predictors of mental health treatment services in a national sample of depressed veterans. *Medical Care* 46(8):813–820.
- Commission on Care. 2016. *Final report of the Commission on Care*. Washington, DC: Commission on Care.
- Cooper, L. A., J. J. Gonzales, J. J. Gallo, K. M. Rost, L. S. Meredith, L. V. Rubenstein, N. Y. Wang, and D. E. Ford. 2003. The acceptability of treatment for depression among African-American, Hispanic, and white primary care patients. *Medical Care* 41(4):479–489.
- Corrigan, P. W., B. G. Druss, and D. A. Perlick. 2014. The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest* 15(2):37–70.
- Davis, T. D., T. L. Deen, J. C. Fortney, G. Sullivan, and T. J. Hudson. 2014. Utilization of VA mental health and primary care services among Iraq and Afghanistan veterans with depression: The influence of gender and ethnicity status. *Military Medicine* 179(5):515–520.
- De Luca, S. M., J. R. Blossnich, E. A. Hentschel, E. King, and S. Amen. 2016. Mental health care utilization: How race, ethnicity and veteran status are associated with seeking help. *Community Mental Health Journal* 52(2):174–179.
- Di Leone, B. A., D. Vogt, J. L. Gradus, A. E. Street, H. L. Giasson, and P. A. Resick. 2013. Predictors of mental health care use among male and female veterans deployed in support of the wars in Afghanistan and Iraq. *Psychological Services* 10(2):145–151.
- Di Leone, B. A., J. M. Wang, N. Kressin, and D. Vogt. 2016. Women's veteran identity and utilization of VA health services. *Psychological Services* 13(1):60–68.

- Duke, M. R., R. S. Moore, and G. M. Ames. 2011. PTSD treatment-seeking among rural Latino combat veterans: A review of the literature. *Journal of Rural Social Sciences* 26(3):157–180.
- Eliacin, J., A. L. Rollins, D. J. Burgess, M. P. Salyers, and M. S. Matthias. 2016. Patient activation and visit preparation in African American veterans receiving mental health care. *Cultural Diversity & Ethnic Minority Psychology* 22(4):580–587.
- Fannin, J. M., and J. N. Barnes. 2007. Recruitment of physicians to rural America: A view through the lens of transaction cost theory. *Journal of Rural Health* 23(2):141–149.
- Fox, A. B., E. C. Meyer, and D. Vogt. 2015. Attitudes about the VA health-care setting, mental illness, and mental health treatment and their relationship with VA mental health service use among female and male OEF/OIF veterans. *Psychological Services* 12(1):49–58.
- Gara, M. A., W. A. Vega, S. Arndt, M. Escamilla, D. E. Fleck, W. B. Lawson, I. Lesser, H. W. Neighbors, D. R. Wilson, L. M. Arnold, and S. M. Strakowski. 2012. Influence of patient race and ethnicity on clinical assessment in patients with affective disorders. *Archives of General Psychiatry* 69(6):593–600.
- Gates, G. 2004. *Gay men and lesbians in the U.S. military*. Washington, DC: Urban Institute.
- Gorman, L. A., A. J. Blow, B. D. Ames, and P. L. Reed. 2011. National Guard families after combat. *Psychiatric Services* 62(1):28–34.
- Grigsby, B., A. G. Brega, R. E. Bennett, P. A. Devore, M. J. Paulich, S. G. Talkington, N. R. Floersch, P. L. Barton, S. Neal, T. M. Araya, J. L. Loker, N. Krohn, and J. Grigsby. 2007. The slow pace of interactive video telemedicine adoption: The perspective of telemedicine program administrators on physician participation. *Telemedicine Journal and E Health* 13(6):645–656.
- Gross, L. W. 2007. Assisting American Indian veterans of Iraq and Afghanistan cope with posttraumatic stress disorder: Lessons from Vietnam veterans and the writings of Jim Northrup. *The American Indian Quarterly* 31(3):373–409.
- Grossbard, J. R., K. Lehavot, K. D. Hoerster, M. Jakupcak, K. H. Seal, and T. L. Simpson. 2013. Relationships among veteran status, gender, and key health indicators in a national young adult sample. *Psychiatric Services* 64(6):547–553.
- Grubaugh, A. L., B. C. Frueh, J. D. Elhai, J. Monnier, R. G. Knapp, and K. M. Magruder. 2006. Racial differences in psychiatric symptom patterns and service use in VA primary care clinics. *Psychiatric Services* 57(3):410–413.
- Grubaugh, A. L., D. M. Slagle, M. Long, B. C. Frueh, and K. M. Magruder. 2008. Racial disparities in trauma exposure, psychiatric symptoms, and service use among female patients in Veterans Affairs primary care clinics. *Womens Health Issues* 18(6):433–441.
- Hamilton, A. B., S. M. Frayne, K. M. Cordasco, and D. L. Washington. 2013. Factors related to attrition from VA healthcare use: Findings from the National Survey of Women Veterans. *Journal of General Internal Medicine* 28(Suppl 2):S510–S516.
- Hannold, E. M., I. M. Freytes, and C. R. Uphold. 2011. Unmet health services needs experienced by Puerto Rican OEF/OIF veterans and families post deployment. *Military Medicine* 176(4):381–388.
- Harada, N. D., J. Damron-Rodriguez, V. M. Villa, D. L. Washington, S. Dhanani, H. Shon, M. Chattopadhyay, H. Fishbein, M. Lee, T. Makinodan, and R. Andersen. 2002. Veteran identity and race/ethnicity: Influences on VA outpatient care utilization. *Medical Care* 40(1 Suppl):I117–I128.
- Hebert, P. L., and S. E. Hernandez. 2016. Providing patient-centered care to veterans of all races: Challenges and evidence of success. *Journal of General Internal Medicine* 31(12):1412–1414.
- Hernandez, S. E., L. Taylor, D. Grembowski, R. J. Reid, E. Wong, K. M. Nelson, C. F. Liu, S. D. Fihn, and P. L. Hebert. 2016. A first look at PCMH implementation for minority veterans: Room for improvement. *Medical Care* 54(3):253–261.
- Hoge, C. W., C. A. Castro, S. C. Messer, D. McGurk, D. I. Cotting, and R. L. Koffman. 2004. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine* 351(1):13–22.
- Holiday, L. F., G. Bell, R. E. Klein, and M. R. Wells. 2006. *American Indian and Alaska native veterans: Lasting contributions*. Washington, DC: Assistant Secretary of Policy, Planning, and Preparedness, Department of Veterans Affairs.
- Hostetter, C. L., and J. D. Felsen. 1975. Multiple variable motivators involved in the recruitment of physicians for the Indian Health Service. *Public Health Reports* 90(4):319–324.
- Hurtado, S. L., C. M. Simon-Arndt, J. McAnany, and J. A. Crain. 2015. Acceptability of mental health stigma-reduction training and initial effects on awareness among military personnel. *Springerplus* 4:606.
- Hynes, D. M., K. Koelling, K. Stroupe, N. Arnold, K. Mallin, M.-W. Sohn, F. M. Weaver, L. Manheim, and L. Kok. 2007. Veterans' access to and use of Medicare and Veterans Affairs health care. *Medical Care* 45(3):214–223.
- Hyun, J. K., J. Pavao, and R. Kimerling. 2009. Military sexual trauma. *PTSD Research Quarterly* 20(2):1–3.
- IOM (Institute of Medicine). 2013. *Returning home from Iraq and Afghanistan: Assessment of readjustment needs of veterans, service members, and their families*. Washington, DC: The National Academies Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.

- Johnson, J. L., and M. C. Cameron. 2001. Barriers to providing effective mental health services to American Indians. *Mental Health Services Research* 3(4):215–223.
- Johnson, L., J. Shipherd, and H. M. Walton. 2016. The psychologist's role in transgender-specific care with U.S. veterans. *Psychological Services* 13(1):69–76.
- Johnson, P. J., K. F. Carlson, and M. O. Hearst. 2010. Healthcare disparities for American Indian veterans in the United States: A population-based study. *Medical Care* 48(6):563–569.
- Jones, A. L., M. K. Mor, J. P. Cashy, A. J. Gordon, G. L. Haas, J. H. Schaefer, Jr., and L. R. Hausmann. 2016. Racial/ethnic differences in primary care experiences in patient-centered medical homes among veterans with mental health and substance use disorders. *Journal of General Internal Medicine* 31(12):1435–1443.
- Kales, H. C., J. Kavanagh, C. Chiang, H. M. Kim, T. Bishop, M. Valenstein, and F. C. Blow. 2016. Predictors of antidepressant nonadherence among older veterans with depression. *Psychiatric Services* 67(7):728–734.
- Kaufman, C., T. Noe, B. Bair, N. Dailey, and J. Shore. 2010. *How rural are American Indian and Alaska native veterans?* Salt Lake City, UT: Veterans Rural Health Resource Center, Western Region Native Domain.
- Kauth, M. R., J. C. Shipherd, J. Lindsay, J. R. Blossich, G. R. Brown, and K. T. Jones. 2014. Access to care for transgender veterans in the Veterans Health Administration: 2006–2013. *American Journal of Public Health* 104(Suppl 4):S532–S534.
- Kelly, M. M., D. S. Vogt, E. M. Scheiderer, P. Ouimette, J. Daley, and J. Wolfe. 2008. Effects of military trauma exposure on women veterans' use and perceptions of Veterans Health Administration care. *Journal of General Internal Medicine* 23(6):741–747.
- Kertesz, S. G., C. L. Holt, J. L. Steward, R. N. Jones, D. L. Roth, E. Stringfellow, A. J. Gordon, T. W. Kim, E. L. Austin, S. R. Henry, N. Kay Johnson, U. Shanette Granstaff, J. J. O'Connell, J. F. Golden, A. S. Young, L. L. Davis, and D. E. Pollio. 2013. Comparing homeless persons' care experiences in tailored versus nontailored primary care programs. *American Journal of Public Health* 103(Suppl 2):S331–S339.
- Kim, P. Y., R. L. Toblin, L. A. Riviere, B. C. Kok, S. H. Grossman, and J. E. Wilk. 2016. Provider and nonprovider sources of mental health help in the military and the effects of stigma, negative attitudes, and organizational barriers to care. *Psychiatric Services* 67(2):221–226.
- Kimerling, R., K. Gima, M. W. Smith, A. Street, and S. Frayne. 2007. The Veterans Health Administration and military sexual trauma. *American Journal of Public Health* 97(12):2160–2166.
- Kimerling, R., J. Pavao, C. Valdez, H. Mark, J. K. Hyun, and M. Saweikis. 2011. Military sexual trauma and patient perceptions of Veteran Health Administration health care quality. *Women's Health Issues* 21(4 Suppl):S145–S151.
- Kimerling, R., L. A. Bastian, B. A. Bean-Mayberry, M. M. Bucossi, D. V. Carney, K. M. Goldstein, C. S. Phibbs, A. Pomernacki, A. G. Sadler, E. M. Yano, and S. M. Frayne. 2015. Patient-centered mental health care for female veterans. *Psychiatric Services* 66(2):155–162.
- Koo, K. H., C. L. Hebenstreit, E. Madden, K. H. Seal, and S. Maguen. 2015a. Race/ethnicity and gender differences in mental health diagnoses among Iraq and Afghanistan veterans. *Psychiatry Research* 229(3):724–731.
- Koo, K. H., E. Madden, and S. Maguen. 2015b. Race-ethnicity and gender differences in VA health care service utilization among U.S. veterans of recent conflicts. *Psychiatric Services* 66(5):507–513.
- Koo, K. H., C. L. Hebenstreit, E. Madden, and S. Maguen. 2016. PTSD detection and symptom presentation: Racial/ethnic differences by gender among veterans with PTSD returning from Iraq and Afghanistan. *Journal of Affective Disorders* 189:10–16.
- Kramer, B. J., M. Wang, S. Jouldjian, M. L. Lee, B. Finke, and D. Saliba. 2009. Veterans Health Administration and Indian Health Service: Healthcare utilization by Indian Health Service enrollees. *Medical Care* 47(6):670–676.
- Kulesza, M., E. Pedersen, P. Corrigan, and G. Marshall. 2015. Help-seeking stigma and mental health treatment seeking among young adult veterans. *Military Behavioral Health* 3(4):230–239.
- Lehavot, K., C. Der-Martirosian, T. L. Simpson, A. G. Sadler, and D. L. Washington. 2013. Barriers to care for women veterans with posttraumatic stress disorder and depressive symptoms. *Psychological Services* 10(2):203–212.
- Lipari, R. N., P. J. Cook, L. M. Rock, and K. Matos. 2008. *2006 gender relations survey of active duty members*. Arlington, VA: Defense Manpower Data Center.
- Litz, B. T., S. M. Orsillo, M. Friedman, P. Ehlich, and A. Batres. 1997. Posttraumatic stress disorder associated with peacekeeping duty in Somalia for U.S. military personnel. *American Journal of Psychiatry* 154(2):178–184.
- Long, J. A., M. I. Bamba, B. Ling, and J. A. Shea. 2006. Missing race/ethnicity data in Veterans Health Administration based disparities research: A systematic review. *Journal of Health Care for the Poor and Underserved* 17(1):128–140.
- Lucksted, A., A. Drapalski, C. Calmes, C. Forbes, B. DeForge, and J. Boyd. 2011. Ending self-stigma: Pilot evaluation of a new intervention to reduce internalized stigma among people with mental illnesses. *Psychiatric Rehabilitation Journal* 35(1):51–54.

- Maguen, S., T. J. Metzler, B. T. Litz, K. H. Seal, S. J. Knight, and C. R. Marmar. 2009. The impact of killing in war on mental health symptoms and related functioning. *Journal of Traumatic Stress* 22(5):435–443.
- Maguen, S., B. Cohen, L. Ren, J. Bosch, R. Kimerling, and K. Seal. 2012. Gender differences in military sexual trauma and mental health diagnoses among Iraq and Afghanistan veterans with posttraumatic stress disorder. *Womens Health Issues* 22(1):e61–e66.
- Manhapa, A., L. Quinones, and R. Rosenheck. 2016. Characteristics of veterans receiving buprenorphine vs. methadone for opioid use disorder nationally in the Veterans Health Administration. *Drug & Alcohol Dependence* 160:82–89.
- McGuire, J., L. Gelberg, J. Blue-Howells, and R. A. Rosenheck. 2009. Access to primary care for homeless veterans with serious mental illness or substance abuse: A follow-up evaluation of co-located primary care and homeless social services. *Administration & Policy in Mental Health & Mental Health Services Research* 36(4):255–264.
- Mittal, D., G. Sullivan, L. Chekuri, E. Allee, and P. W. Corrigan. 2012. Empirical studies of self-stigma reduction strategies: A critical review of the literature. *Psychiatric Services* 63(10):974–981.
- Mittal, D., K. L. Drummond, D. Blevins, G. Curran, P. Corrigan, and G. Sullivan. 2013. Stigma associated with PTSD: Perceptions of treatment seeking combat veterans. *Psychiatric Rehabilitation Journal* 36(2):86–92.
- Murdoch, M., J. Hodges, D. Cowper, L. Fortier, and M. van Ryn. 2003. Racial disparities in VA service connection for posttraumatic stress disorder disability. *Medical Care* 41(4):536–549.
- O’Toole, T. P., C. Bourgault, E. E. Johnson, S. G. Redihan, M. Borgia, R. Aiello, and V. Kane. 2013. New to care: Demands on a health system when homeless veterans are enrolled in a medical home model. *American Journal of Public Health* 103(Suppl 2):S374–S379.
- Perl, L. 2014. *Veterans and homelessness*. Washington, DC: Congressional Research Service.
- Pietrzak, R. H., D. C. Johnson, M. B. Goldstein, J. C. Malley, and S. M. Southwick. 2009. Perceived stigma and barriers to mental health care utilization among OEF–OIF veterans. *Psychiatric Services* 60(8):1118–1122.
- Pyne, J. M., E. J. Kuc, P. J. Schroeder, J. C. Fortney, M. Edlund, and G. Sullivan. 2004. Relationship between perceived stigma and depression severity. *Journal of Nervous & Mental Disease* 192(4):278–283.
- Quinones, A. R., S. M. Thielke, K. A. Beaver, R. B. Trivedi, E. C. Williams, and V. S. Fan. 2014. Racial and ethnic differences in receipt of antidepressants and psychotherapy by veterans with chronic depression. *Psychiatric Services* 65(2):193–200.
- Ritsher, J. B., P. G. Otilingam, and M. Grajales. 2003. Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research* 121(1):31–49.
- Rosen, C. S., M. A. Greenbaum, J. E. Fitt, C. Laffaye, V. A. Norris, and R. Kimerling. 2011. Stigma, help-seeking attitudes, and use of psychotherapy in veterans with diagnoses of posttraumatic stress disorder. *Journal of Nervous & Mental Disease* 199(11):879–885.
- Rossum, R. C., S. Shortreed, K. J. Coleman, A. Beck, B. E. Waitzfelder, C. Stewart, B. K. Ahmedani, J. E. Zeber, and G. E. Simon. 2016. Antidepressant adherence across diverse populations and healthcare settings. *Depression and Anxiety* 33(8):765–774.
- Rusch, N., E. Abbruzzese, E. Hagedorn, D. Hartenhauer, I. Kaufmann, J. Curschellas, S. Ventling, G. Zuaboni, R. Bridler, M. Olschewski, W. Kawohl, W. Rossler, B. Kleim, and P. W. Corrigan. 2014. Efficacy of Coming Out Proud to reduce stigma’s impact among people with mental illness: Pilot randomised controlled trial. *British Journal of Psychiatry* 204:391–397.
- Saha, S., M. Freeman, J. Toure, K. M. Tippens, C. Weeks, and S. Ibrahim. 2007. *Racial and ethnic disparities in the VA healthcare system: A systematic review*. Washington, DC: Department of Veterans Affairs.
- Schlenger, W. E., R. A. Kulka, J. A. Fairbank, R. L. Hough, B. Kathleen Jordan, C. R. Marmar, and D. S. Weiss. 1992. The prevalence of post-traumatic stress disorder in the Vietnam generation: A multimethod, multisource assessment of psychiatric disorder. *Journal of Traumatic Stress* 5(3):333–363.
- Sharp, M. L., N. T. Fear, R. J. Rona, S. Wessely, N. Greenberg, N. Jones, and L. Goodwin. 2015. Stigma as a barrier to seeking health care among military personnel with mental health problems. *Epidemiological Review* 37:144–162.
- Shekelle, P. G., F. Batuman, B. Bean-Mayberry, C. Goldzweig, C. Huang, I. M. Miake-Lye, D. L. Washington, E. M. Yano, and L. C. Zephyrin. 2011. *Health effects of military service on women veterans*. Washington, DC: VA Evidence-based Synthesis Program, Department of Veterans Affairs.
- Shore, J. H., E. Brooks, D. Savin, H. Orton, J. Grigsby, and S. M. Manson. 2008. Acceptability of telepsychiatry in American Indians. *Telemedicine Journal and E Health* 14(5):461–466.
- Simpson, T. L., K. F. Balsam, B. N. Cochran, K. Lehavot, and S. D. Gold. 2013. Veterans Administration health care utilization among sexual minority veterans. *Psychological Services* 10(2):223–232.
- Spaulding, R. J., T. Russo, D. J. Cook, and G. C. Doolittle. 2005. Diffusion theory and telemedicine adoption by Kansas health-care providers: Critical factors in telemedicine adoption for improved patient access. *Journal of Telemedicine and Telecare* 11(Suppl 1):107–109.

- Spoont, M. R., J. Hodges, M. Murdoch, and S. Nugent. 2009. Race and ethnicity as factors in mental health service use among veterans with PTSD. *Journal of Traumatic Stress* 22(6):648–653.
- Spoont, M. R., D. B. Nelson, M. Murdoch, N. A. Sayer, S. Nugent, T. Rector, and J. Westermeyer. 2015. Are there racial/ethnic disparities in VA PTSD treatment retention? *Depression and Anxiety* 32(6):415–425.
- Stecker, T., J. C. Fortney, and C. D. Sherbourne. 2011. An intervention to increase mental health treatment engagement among OIF veterans: A pilot trial. *Military Medicine* 176(6):613–619.
- Street, A. E., J. Stafford, C. M. Mahan, and A. Hendricks. 2008. Sexual harassment and assault experienced by reservists during military service: Prevalence and health correlates. *Journal of Rehabilitation Research & Development* 45(3):409–419.
- Suris, A., and L. Lind. 2008. Military sexual trauma: A review of prevalence and associated health consequences in veterans. *Trauma, Violence, & Abuse* 9(4):250–269.
- Suris, A., L. Lind, T. M. Kashner, P. D. Borman, and F. Petty. 2004. Sexual assault in women veterans: An examination of PTSD risk, health care utilization, and cost of care. *Psychosomatic Medicine* 66(5):749–756.
- Tsai, J., and G. Kong. 2012. Mental health of Asian American and Pacific Islander military veterans: Brief review of an understudied group. *Military Medicine* 177(11):1438–1444.
- Tsai, J., and R. A. Rosenheck. 2015. Risk factors for homelessness among U.S. veterans. *Epidemiological Review* 37:177–195.
- Tsai, J., J. M. Whealin, and R. H. Pietrzak. 2014. Asian American and Pacific Islander military veterans in the United States: Health service use and perceived barriers to mental health services. *American Journal of Public Health* 104(S4):S538–S547.
- U.S. Interagency Council on Homelessness. 2017. *Ending veteran homelessness*. <https://www.usich.gov/goals/veterans> (accessed June 6, 2017).
- VA (Department of Veterans Affairs). 2012a. *American Indian and Alaska Native service members and veterans*. Washington, DC: Department of Veterans Affairs.
- VA. 2012b. *Healthcare inspection: Inpatient and residential programs for female veterans with mental health conditions related to military sexual trauma*. Washington, DC: Department of Veterans Affairs.
- VA. 2013. *VHA directive 2013-003: Providing health care for transgender and intersex veterans*. Washington, DC: Department of Veterans Affairs.
- VA. 2015a. *Analysis of VA health care utilization among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans: Cumulative from 1st qtr FY 2002 through 2nd qtr FY 2015 (October 1, 2001 – March 31, 2015)*. Washington, DC: Department of Veterans Affairs.
- VA. 2015b. *Patient care services: Lesbian, gay, bisexual, and transgender (LGBT) veteran care*. <http://www.patientcare.va.gov/LGBT/index.asp> (accessed February 9, 2016).
- VA. 2015c. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2015d. *VHA health equity action plan fact sheet*. Washington, DC: Department of Veterans Affairs.
- VA. 2016. *Homeless veterans: Mental health services*. http://www.va.gov/homeless/mental_health_services.asp (accessed February 9, 2016).
- VA. 2017a. *Follow up: Information request from NASEM committee to evaluate VA's mental health services*. Department of Veterans Affairs.
- VA. 2017b. *Minority veterans report: Military service history and VA benefit utilization statistics*. Washington, DC: Department of Veterans Affairs.
- VA. 2017c. *Response to committee request for information*. Department of Veterans Affairs.
- VanSickle, M., A. Werbel, K. Perera, K. Pak, K. DeYoung, and M. Ghahramanlou-Holloway. 2016. Perceived barriers to seeking mental health care among United States Marine Corps noncommissioned officers serving as gatekeepers for suicide prevention. *Psychological Assessment* 28(8):1020–1025.
- Vogt, D. 2011. Mental health-related beliefs as a barrier to service use for military personnel and veterans: A review. *Psychiatric Services* 62(2):135–142.
- Washington, D. L., N. D. Harada, V. M. Villa, J. Damron-Rodriguez, S. Dhanani, H. Shon, and T. Makinodan. 2002. Racial variations in Department of Veterans Affairs ambulatory care use and unmet health care needs. *Military Medicine* 167(3):235–241.
- Washington, D. L., V. Villa, A. Brown, J. Damron-Rodriguez, and N. Harada. 2005. Racial/ethnic variations in veterans' ambulatory care use. *American Journal of Public Health* 95(12):2231–2237.
- Washington, D. L., E. M. Yano, B. Simon, and S. Sun. 2006. To use or not to use. What influences why women veterans choose VA health care. *Journal of General Internal Medicine* 21(Suppl 3):S11–S18.
- Yanos, P. T., A. Lucksted, A. L. Drapalski, D. Roe, and P. Lysaker. 2015. Interventions targeting mental health self-stigma: A review and comparison. *Psychiatric Rehabilitation Journal* 38(2):171–178.

Health Technology for Mental Health Care

The Department of Veterans Affairs (VA) has long been a national and international leader in the implementation of health technologies for clinical purposes—through its national electronic system, in the area of telemedicine, and, in recent years, with the introduction of a series of patient-centered online tools, such as MyHealthVet (an online portal through which veterans can access their medical information and message providers) and Blue Button (a feature of MyHealthVet which allows veterans to save, download, and print their health information), and also increasing numbers of mobile applications (apps). With this background, the VA is in an excellent position to substantially expand and scale its use of health technologies and thereby gain added value from its experience in health technology and the skills of a large number of their staff, which match well the expertise in information technology of the younger generation of veterans now being served. The challenge for the VA is to take its current experience in health technologies and routinely and widely integrate a large range of disparate health technologies into clinical care processes throughout the VA health care system, while also connecting with providers outside of the VA to meet the needs of the current and future population of veterans. This chapter describes the current state of health technology at the VA as well as some of the barriers throughout the system that may inhibit the wider use of health technology among veterans and providers. It also summarizes committee site visits and survey findings related to health technology.

ELECTRONIC HEALTH RECORD

An electronic health record (EHR) is a digital version of a patient’s medical history. It is maintained by health providers and should include all clinical data related to a patient. This includes demographics, clinical notes, medication and clinical history, vital signs, labs, and any other information related to a patient’s care. At the VA, EHRs allow different providers within the system easy access to a veteran’s health data and streamline the sharing of clinical information across the system (CMS, 2017).

The VA pioneered EHR technology with the development of its VistA system, which originated in the 1970s but was implemented system-wide between February 1997 and December 1999. By 2009,

nearly half of hospitals in the United States with system-wide health information technology (IT) systems used VistA or a VistA derivative (Garber et al., 2014). The VistA EHR allowed for computerized order entry, electronic prescribing, bar code medication administration, and embedded clinical guidelines, and it also allowed for the easy sharing of records between providers within the system. In surveys from 2011 and 2012, VistA outscored a large majority of health IT competitors, including those offered by industry leaders Epic and McKesson (Garber et al., 2014).

In a recent assessment of VA health IT, however, MITRE reported that in the past decade the VA has diverted resources from the EHR to other IT development projects, hampering and delaying improvements to the EHR system and putting the VA EHR at risk of becoming obsolete (MITRE Corporation, 2015). At present, the VA EHR lacks many features currently found in commercially available EHR products (Commission on Care, 2016). The MITRE assessment revealed that while most of clinicians are reasonably satisfied with the current VA EHR, many want the same level of features and functionality that is emerging in EHRs in the commercial marketplace (such as greater integration and mobility) (MITRE Corporation, 2015).

Improving the VA's EHR will require a working knowledge of the VistA system architecture, a platform that is not widely taught outside of the VA and that requires several years of training for developers to learn (MITRE Corporation, 2015). Furthermore, there are 130 modified instances of VistA across the VA system, making it more difficult to develop and improve the EHR system-wide. There is no environment within the VA to test any improvements across the 130 instances of VistA currently in use (MITRE Corporation, 2015).

The interoperability of the VA's EHR, both with the Department of Defense (DoD) EHR system (needed when service members transition to veteran status) and with outside medical systems has been a long-standing issue for the VA, especially as veterans have been using non-VA services more frequently in recent years. To address interoperability issues and barriers to improving the EHR, in 2014 the VA established the VistA Evolution program. The goal of the program is to upgrade the technical infrastructure while reducing system complexity and to provide interoperability with DoD and other health care partners. In its assessment of VA health information technology, MITRE determined that the VistA Evolution program is "not adequately staffed or organized to successfully manage the development and integration of a such a large complex software program, which increases the risk of schedule delays or failed delivery of clinical IT capabilities" (MITRE Corporation, 2015, p. 34). That report recommends that the VA complete a comprehensive cost-benefit analysis to determine if it makes sense to continue using and trying to modernize the current VistA EHR versus turning to a commercially available or open-source EHR. Nevertheless, improvements to the EHR, including interoperability with DoD and other health sector systems, are scheduled to be incrementally rolled out until they are completed in fiscal year (FY) 2018 (GAO, 2016).

In light of this and in acknowledgment of the many years and dollars spent trying to achieve interoperability, in 2017 the VA announced that it will abandon plans to improve the VistA EHR and adopt MHS GENESIS (based on the Cerner Millennium platform), the same EHR system in place at the DoD. While it will be an enormous undertaking to transfer all VA patient data to a new system, ultimately all patient data from both departments will reside in one common system. This will allow for a simple transition between departments without the added burden of manual and electronic reconciliation of data between the two systems. The announcement acknowledged that adopting the DoD EHR does not solve the problem of operability with other systems outside the VA. However, the announcement stressed the importance of working toward interoperability with other platforms that are in use in the non-VA or DoD sectors (VA, 2017b).

TELEMEDICINE

Telemedicine is the use of electronic information and communication technologies to provide health care (IOM, 1996). Historically, telemedicine has included a variety of modalities to deliver care such

as telephone, email, internet, fax, still imaging, and videoconferencing (Antonacci et al., 2008). A more recent and broader interpretation defines *virtual health care* as the use of communication and information technologies to bridge geographic distance and to facilitate the interactions and relationships necessary for providing accessible, coordinated, and high-quality care (Kizer, 2011). As such, it really includes all information technologies, even mobile apps, designed to be used at the patient–provider interface.

Telemedicine provides a mechanism by which many access barriers might be overcome, particularly with regard to wait times, the cost of care, travel distances to treatment facilities, and stigma (Bashshur et al., 2016; Pietrzak et al., 2009; Wong et al., 2007). The VA has been in the forefront of information technology, and telemedicine has been a focus for recent VA funding—the FY 2016 budget requested \$1.224 billion for telehealth, an increase of 11.5 percent from 2015 (Clancy, 2015). The VA has employed initiatives to expand services into a national tele-mental health clinical and technical infrastructure. In FY 2014, the VA provided more than 2 million consults to 717,000 veterans, and services grew 18 percent from the previous year (Clancy, 2015). In FY 2015, the VA reported using telemedicine across multiple specialties with 677,000 veterans during that year, or 12 percent of the total VA patient population of 5.6 million veterans (VA, 2016). Of all the veterans served by telehealth in FY 2014, 45 percent resided in rural locations with otherwise limited access to VA care. Clinical tele-mental health is one of the most commonly used VA telemedicine services. In FY 2016, 133,500 unique veterans used tele-mental health services for a total of 427,000 encounters, an increase of 16 percent from FY 2015 (VA, 2017a).

In the VA, tele-mental health is currently used to treat nearly every *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* diagnosis including posttraumatic stress disorder (PTSD), substance use disorders, depression, and anxiety disorders across nearly every treatment modality, including individual therapies, group therapies, medication management, cognitive behavioral therapy, psychological screening, and more (Godleski, 2014). However, PTSD, depression, and anxiety are more likely to be treated via tele-mental health than substance use and psychotic disorders. This difference in treatment by diagnosis is likely due to the fact that the evidence base for PTSD and depression treated via tele-mental health is stronger than for substance use and psychosis. Furthermore, substance use disorder is frequently treated in a group setting, and group tele-mental health is not widely practiced in the VA despite evidence suggesting its efficacy (Grubbs et al., 2015a). Clinicians from the VA, including psychiatrists, psychologists, social workers, advanced practice psychiatric nurses, and registered nurses, deliver tele-mental health to and from a variety of venues including VA medical centers (VAMCs), community-based outpatient centers (CBOCs), non-VA health care facilities, student health centers, homeless shelters, and private residences. A majority of VA-delivered tele-mental health, however, is general or specialty mental health care delivered from a VAMC to a CBOC primarily via videoconference.

In 2008 the VA created a comprehensive National Telemental Health Training Program to teach clinicians best practices in delivering tele-mental health (Godleski, 2012). The training curriculum covers a number of domains related to administering tele-mental health. These include (1) general information about tele-mental health (history, seminal studies); (2) clinical conduct, such as maximizing eye contact and information gathering about the patient’s site/location; (3) safety and legal issues; (4) initial competency, with clinicians assessed in a 1-hour simulated videoconference; (5) clinical scenarios, with clinicians receiving instruction on how to manage emergency situations via videoconference; and (6) ongoing competency, with clinicians receiving continued education to stay up to date about the expanding evidence base and best practices. Furthermore, the training program draws from a number of modalities for educational programming and also provides individualized training for clinicians new to tele-mental health and advanced training for providers interested in furthering their skills. The program monitors its effectiveness with post-training questionnaires (Godleski, 2012).

The VA National Telemental Health Center, based in the VA Connecticut Healthcare System, was created to unify the use of tele-mental health within the VA. The center works to ensure that universal

access to tele-mental health is available nationwide, and it strives to increase access to specialty care via telehealth. Furthermore, it convenes panels of experts to help further the field and acts as a resource bank for best practices (Godleski, 2014). For PTSD treatment, the VA National Telemental Health Center is promoting the delivery of prolonged exposure therapy and cognitive processing therapy via tele-mental health, particularly to veterans in rural areas where these therapies may not be otherwise available (IOM, 2014). Additionally, the VA has begun to establish 10 tele-mental health clinic resource hubs. While as of June 2017 not all of them were fully operational, since June 2016 they have contributed to nearly 55,000 tele-mental health visits (VA, 2017a).

It may be less expensive to provide care via telehealth than via in-person care. In a cost comparison of care delivered via a care coordination home telehealth (CCHT) model versus usual (in-person) care, Darkins et al. (2014) found that costs were significantly lower for veterans receiving CCHT. The in-person cohort's cost of care increased by 48 percent from FY 2009 to FY 2012, whereas the cost of care for veterans receiving CCHT decreased by 4 percent over the same time period. Admissions also increased for the in-person care group and decreased for the intervention group (which would at least partly explain the expenditure patterns for both groups). In a 2016 review, Bashshur et al. (2016) also found that telemedicine interventions were more cost effective than in-person care; however, only five studies were reviewed, only one of which was veteran specific.

Some evidence suggests that patients may be more receptive to using health technologies than providers. A recent review of telepsychiatry outcomes (Hubley et al., 2016) revealed that a majority of studies on the topic reported high patient satisfaction with telepsychiatry services (the review was not veteran specific). Of the 31 studies examined in that review, 23 showed that patients rated their telepsychiatry experiences as “good” or “excellent,” while the others reported mixed reactions among patients. On the other hand, provider satisfaction was more mixed. Rural primary care providers were more satisfied than their suburban counterparts. Providers also perceived patients to be less satisfied with telepsychiatry than the patients actually felt. One study in the review found that providers resisted using telepsychiatry, and in another study providers reported perceiving technological challenges that they felt would hinder doctor–patient interactions (Hubley et al., 2016). Other studies documented providers expressing concerns about difficulty incorporating telepsychiatry into their practices and concern about therapeutic rapport. These were not, however, VA providers expressing those concerns.

In its assessment of the VA's information technology, the MITRE Corporation (2015) found that while the VA was an early adopter of telehealth and generally provides good oversight and support for the technology, system-wide problems limit telehealth's full potential to provide services to veterans. Problems with the VA's existing telehealth system include the following:

- The Office of Information and Technology (the central office that manages the VA's system-wide IT infrastructure) is slow to respond to the technical needs of the Veterans Integrated Service Networks (VISNs). MITRE reported that the responses for technical support and resolution requests often take very long or go unanswered due in part to confusion regarding which offices are responsible for various equipment. Furthermore, service ticket data are not tracked (MITRE Corporation, 2015).
- Limited technical support is available to veteran users of in-home telehealth. Technicians test the telehealth connection with veterans in advance of an appointment, but recruiting and retaining technicians has been challenging for the VA, which has limited the amount of time that technicians can spend helping veterans troubleshoot the installation. If veterans are unable to install and use the telehealth software, they cannot participate in their telehealth appointment

and must make another in-person appointment or go to a VA location that provides telehealth services (MITRE Corporation, 2015).

- It is difficult for clinicians to provide telehealth to veterans in other VISNs. While the VA is moving to address these issues, scheduling, patient records, credentialing, and provider privileges across VISN lines are restricted (MITRE Corporation, 2015).

Effectiveness

Bashshur et al. (2016) completed a review of the empirical evidence concerning the feasibility, acceptance, cost, quality of care, and health outcomes of telemedicine interventions in mental health. The review included telemedicine studies of children, adults, the elderly, veterans, urban groups, rural groups, and different ethnic groups both within the United States and abroad. While the populations studied go far beyond the scope of this report, nearly all of the studies that were reviewed demonstrated the feasibility of telemedicine interventions using a variety of modalities to address a variety of mental health conditions across populations. The review found that telemedicine can improve access to mental health care and can effectively deliver psychotherapies and improve efficiency, the quality of care, and cost effectiveness.

Those findings essentially confirmed those of an earlier review (Hilty et al., 2013) that evaluated the effectiveness of tele-mental health compared to in-person care. The authors found that, generally speaking, tele-mental health services are effective for diagnosis and assessment across many populations, for many disorders, and in many settings, including when integrated in primary care, and that they are comparable to in-person mental health care. The authors did, however, call for more randomized trials to enhance the evidence base, particularly for disorders that have not been thoroughly evaluated (for example, anxiety, substance use, and psychotic disorders).

The review evaluated three PTSD trials with a veteran cohort (Frueh et al., 2007; Morland et al., 2010, 2011). Frueh et al. (2007) found equal outcomes (clinical and process) and satisfaction at 3-month follow-up, but less comfort among the tele-mental health group in talking to a therapist and worse adherence than the in-person group. Morland et al. (2011) evaluated group cognitive processing therapy delivered to veterans via telehealth and found no significant differences in clinical or process outcome variables. Morland et al. (2010) showed that rural veterans with PTSD receiving telehealth treatment for anger management showed reductions in PTSD-related anger that were similar to those receiving in-person treatment. Telemedicine may be effective for veterans with PTSD because the nature of the illness—with patients being commonly afraid, anxious, and avoidant—makes it a disorder that would seem to be suited to treatment with telemedicine and a range of other patient-focused health technologies. Such technologies allow patients to be treated in their homes or communities, rather than needing to travel to places such as hospitals and clinics in urban areas that may actually exacerbate their symptoms. For those reasons, the future standard of multimodal clinical care for patients with PTSD may include telemedicine and mobile technologies integrated into primary care systems (Chan et al., 2015; Yellowlees et al., 2015).

While the Hilty et al. (2013) review was not specific to veteran populations (although it did include some veteran studies), Godleski et al. (2012b) evaluated outcomes among a large sample of tele-mental health users in the VA between 2006 and 2010. The authors assessed the clinical outcomes (inpatient days and hospital admissions) for 98,609 mental health patients 6 months before and after enrollment in tele-mental health services. Overall, the analysis revealed that after enrolling in tele-mental health services, hospitalizations and the number of admissions and the number of days of hospitalization all decreased by about 25 percent. The decrease was similar for male and female veterans. The authors

surmised that the decrease may have been due to increased access to services, including evidence-based therapies, medication management, and patient education, delivered via tele-mental health. Furthermore, the authors suggested, in some instances tele-mental health may give providers an immediate opportunity to intervene with patients to avert and prevent an escalating crisis (and possibly avoid hospitalization). While there was no specific control group in the study, the authors noted that in contrast to the study participants, VA mental health users overall had a slight increase in hospitalization during the study period.

Fortney et al. (2015) compared a telemedicine-based collaborative model for PTSD to treatment as usual in a randomized clinical trial in 11 VA clinics and showed that patients in the telemedicine group had better overall engagement in their therapies. The study included 265 treatment-resistant rural-dwelling veterans. The collaborative model, Telemedicine Outreach for PTSD (TOP), was designed to support on-site CBOC providers managing patients with PTSD. The on-site providers included primary care physicians, psychiatric advance-practice nurses, social workers, and off-site telepsychiatrists. The off-site collaborative PTSD specialist teams included a nurse care manager, clinical pharmacist, telepsychologist, and telepsychiatrist. While both treatment groups improved, veterans randomized to the TOP intervention experienced significantly greater improvement in PTSD and depression severity, albeit with small to medium effect sizes. The veterans in the TOP group were 18 times more likely to start cognitive processing therapy (CPT) and eight times more likely to complete eight or more sessions of CPT. The authors suggested that the lower engagement in CPT in the cohort receiving in-person care was likely due to the long travel distance to the VAMC. The intervention did not affect medication adherence and had no effect on the likelihood of receiving PTSD medication (Fortney et al., 2015).

Research comparing the efficacy of in-person to telehealth-delivered evidence-based therapies for PTSD is limited but increasing. In a randomized non-inferiority clinical trial, Morland et al. (2014) compared clinical and process outcomes of CPT delivered via telehealth to in-person delivery among rural-dwelling veterans with PTSD. The authors found that the outcomes among the telehealth treatment group were as good as the outcomes in the in-person treatment group. While both groups reported moderate PTSD symptoms at follow-up, at least 50 percent of both groups experienced significant symptom reductions. No significant differences were reported between the groups. Retention in both groups was high, with 85 percent completing 12 sessions. Furthermore, 54 percent of the participants were racial minorities (Morland et al., 2014). In a similar study of women with PTSD (both veterans and civilians), Morland et al. (2015) again found that CPT delivered via telemedicine was comparable and non-inferior to in-person care.

Some studies have found that using technologies to deliver care can lead to better outcomes. For example, a recent randomized trial of 666 active-duty service members (mean age = 31.1) with probable PTSD or depression found that patients receiving centrally assisted collaborative telecare with stepped psychosocial management demonstrated greater reductions of PTSD and depression symptoms than service members receiving care as usual (Engel et al., 2016). This study is one of a number of studies in tele-mental health that are starting to provide evidence that the use of these technologies in certain groups of patients, and also with some diagnostic groups, is actually leading to better standards of results than traditional in-person treatments (Chan et al., 2015; Grubbs et al., 2015b; Myers et al., 2015; Pakyurek et al., 2010; Yellowlees et al., 2015).

The evidence supporting the delivery of prolonged exposure therapy (PET) via telemedicine is less clear. In a randomized trial comparing the outcomes of veterans receiving PET via telemedicine to in-person delivery, Yuen et al. (2015) randomized 52 veterans with PTSD to receive either in-home delivered PET or standard in-person care for 8 to 12 weeks. Both groups experienced significant reductions in PTSD, depression, and anxiety symptoms after completing treatment. Clinician-reported PTSD and patient-reported anxiety showed non-inferiority between the delivery modes. However, the results

were inconclusive for self-report PTSD (using the PTSD checklist) and depression symptoms (using the Back Depression Inventory-II). Dropout rates were 23.7 percent for in-person care and 36.1 percent for telemedicine-delivered care, although this difference was not significant ($p = 0.21$). While the authors did say that outcomes and satisfaction were comparable between telemedicine-delivered PE and in-person delivery, they cautioned that more research is needed comparing the non-inferiority of the delivery modalities (Yuen et al., 2015).

Earlier research comparing telemedicine-delivered PET to in-person delivery has also shown mixed results. Tuerk et al. (2010) showed that while the outcomes were similar for the two delivery modes, effect sizes were lower and non-completion was higher among veterans who received treatment via telehealth. In a study without a randomized design, Gros et al. (2011) found that the effect sizes for telehealth-delivered exposure therapy were comparable to effect sizes for in-person exposure-based treatment for PTSD published in the literature, but smaller than the effect sizes observed in their in-person treatment group. Also, Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veterans were less likely to complete exposure therapy treatment via telehealth than were older Vietnam-era veterans.

Site Visit and Survey Findings

Veteran and provider reports indicate that use of telemedicine varies across the VA. The VA's Veterans Satisfaction Survey (VSS), the VA's annual survey of veterans served by the VA, asks veterans to rate the statement, "I talk to my counselor/therapist by Telemental health," using a scale of 1 to 5, where 1 is strongly disagree, 5 is strongly agree, and 3 is neither. For FY 2016,¹ the VA reported a mean rating of 2.27 (standard deviation = 1.33) (VA, 2016), which possibly suggests some disagreement with this statement. (See Chapter 15 for details about the VSS.)

In all of the locations visited during the site visits, VA staff interviewees reported using telemedicine to varying degrees. In some cases, the technology is being used explicitly to overcome certain access challenges, such as long wait times for initial appointments and space constraints within the facilities:

We're now moving toward tele-mental health to home, so that the veteran doesn't even have to travel anywhere. We work from our office to his home to do PTSD therapy and outpatient care. If they have to wait longer than 2 or 3 weeks, we call our sister [facility] in Cincinnati and get them started with evidence-based practice type of care, exposure care, through tele-mental health. [VA administrator – Cleveland, Ohio]

How do you match an available provider at a certain time with a room that's available at a certain time? We have been consulting with the VISN on making that happen. We have some software person writing code right now to make that happen. . . . To really make it so it's no longer like, "Well, is this clinic in Seattle available?" It's like, "Well, where is the next available person [provider] when the [veteran] is available" as well. [VA staff – Seattle, Washington]

Interviewees also described how the technology can help overcome many of the barriers veterans face in accessing services, such as long drives to get to a VA facility, difficulty getting out of work to come in for an appointment, and the ubiquitous parking challenges at VAMCs around the country:

I use telehealth to offer appointments to OEF-OIF veterans, for instance, that are working. They can take an hour-long break, have their appointment virtually at their place of employment, and then go back to work without having to take half a day off of work driving in from various locations. It's specific to mental health outpatient, basically offering services closer to where they're located. [VA staff – Battle Creek]

¹The FY 2016 report reviewed by the committee covers survey data collected through June 2016.

A lot of our medical centers across the country might have parking problems. Therefore, going into the home is really the way to provide treatment. In mental health it's so easy. We don't have to touch the patient, right? It doesn't matter where they're located. As long as we can see them, and they can see us. We can pick up on body cues, et cetera. [VA administrator – Charleston, South Carolina]

In East Orange, New Jersey, the VAMC created a special women's telehealth initiative in 2012 explicitly to improve service access for women veterans, particularly those living in rural areas. Self-assessment data from the site visit indicated that in fiscal year 2014, the New Jersey VAMC provided tele-mental health services to 107 unique women veterans.

Despite its potential advantages, and the literature indicating its effectiveness, some VA clinicians asserted that remote services are not appropriate for every client:

You . . . [have some] patients who are not reliable, not safe, you don't want to be seeing them in a position where you're in less control. Patients who it's good for them, therapeutic for them to come in, and get out of the house, and actually exercise their independence . . . tele can stunt that. With the right case, I think that it helps access a great deal. [Jesse Brown, Chicago, Illinois]

That [telehealth] is available for our very rural veterans that cannot get here. The problem is with a lot of those veterans, there's usually substance abuse involved or they're suicidal. That prevents us sometimes from doing the home health VTEL services. . . . [Altoona, Pennsylvania]

Some of the veterans are also talking about the only time that they socialize is when they come into a VA for an appointment. So by having telehealth, they are still able to isolate because they're not coming out, they're not joining in with others. [East Orange, New Jersey]

In addition, some veterans interviewed by the site visit teams did not provide a favorable assessment of this approach to mental health treatment:

I didn't particularly care for it because some of the things that we were saying I didn't particularly agree. The other piece of it is that sometimes to me you get better results in seeing somebody face-to-face. . . . I'm not saying it doesn't work, but it didn't work for me. [Charleston, South Carolina]

I didn't have Internet and I didn't have cable TV because I didn't have any money. Tele whatever. I'm not going to the library and sit down in front of a computer and listen to someone else hear me talk about how screwed up I feel like I am. I'm not going to do that. [Battle Creek, Michigan]

It is likely that the presence of such responses reflects a selection effect as these veterans were the ones who were able and willing to drive to a location to meet face-to-face with the study team. Veterans living in rural areas or those who had no means of transportation may have had more—and better—experiences with receiving mental health services remotely, but were not interviewed by the study team. Data from the committee's survey of veterans, reported in Chapter 6, indicate that about 14 percent of veterans surveyed with a need for mental health services self-reported living more than an hour from the nearest VA facility. Among VA users with a need for services, 10 percent reported they live more than 1 hour away from the nearest VA facility offering mental health services (see Chapter 6, Table 6-16). This group of veterans may already be well represented among the current users of tele-mental health in the VA. However, it is notable that living a long distance from a VA facility with mental health services significantly decreased the odds of using VA mental health care over non-VA mental health care (see Chapter 6, Table 6-38). This suggests that further expanding telemedicine options to rural-dwelling veterans may improve access for those who see the distance to the nearest VA mental health facility as a barrier to choosing the VA for their care. Furthermore, rural-dwelling veterans with mental health

conditions are known to use VA services at a lower rate and to have a higher rate of unmet mental health needs than their urban counterparts (Teich et al., 2016).

While it was true in all age groups that when veterans were asked which modes of mental health services they were likely to use in the future, more of them indicated in-person service than chose services delivered via the Internet or phone (see Chapter 6, Table 6-35), the results from the committee's survey showed that veterans 50 years or older were less willing to use the Internet than veterans in younger age groups. In particular, the survey showed that 50 percent of younger veterans (ages 17–29), 46 percent of 30- to 39-year-old veterans, and 50 percent of 40- to 49-year-old veterans said that they were willing to use the Internet for mental health services in the future, whereas only 37 percent of veterans 50 and older did (see Chapter 6, Table 6-36). This suggests that as the veteran population ages, the overall willingness of veterans to use Internet-delivered care may increase.

OTHER HEALTH TECHNOLOGY IN USE AT THE DEPARTMENT OF VETERANS AFFAIRS

The use of technology by the VA to deliver and manage mental health treatment extends beyond tele-mental health. The VA is also using websites and mobile smartphone applications (“mHealth”) to help keep veterans engaged in care between appointments. For example, the VA and DoD’s PTSD Coach is a free mobile application that allows users to track and manage their PTSD symptoms and also connects users to support resources (VA, 2014). A new Veteran Appointment Request app, launched in 2016, allows veterans to view, schedule, and cancel primary care and mental health appointments as well as track the status of the appointment request and review upcoming appointments.² The VA also has its own app store³ with over a dozen apps for both veterans and VA providers. Websites such as Make the Connection⁴ and the National Center for PTSD website⁵ both provide PTSD resources such as program locators, screening tools, and other PTSD-related information for veterans and their families (IOM, 2014).

MyHealthVet

Effectiveness studies of online and mobile technologies are emerging. MyHealthVet⁶ is an online portal for VA health system users to refill prescriptions, communicate with their providers via secure messaging, track appointments, and access health records. The users of MyHealthVet generally like the service and feel that it improves their care (Nazi et al., 2013). In a study of veterans’ use of the Internet and, in particular, of My HealthVet, Tsai and Rosenheck (2012) found that the veterans in a nationally representative sample generally liked and frequently used the Internet, but few of them used MyHealthVet. Among the participants who were VA mental health service users (n = 229), 90 percent used e-mail, 85 percent used the Internet at least once a week, and 79 percent said they liked to receive VA information through the Internet, but only 25 percent used MyHealthVet. OEF/OIF/Operation New Dawn (OND) veterans were more than twice as likely to use MyHealthVet than other veterans (odds ratio = 2.48). The study did not reveal why veterans were not using MyHealthVet, but it did show that the adoption of the portal has been slow (Tsai and Rosenheck, 2012).

² See <https://mobile.va.gov/app/veteran-appointment-request>.

³ See <https://mobile.va.gov/appstore>.

⁴ See <http://maketheconnection.net>.

⁵ See <http://www.ptsd.va.gov>.

⁶ See www.myhealthvet.va.gov.

In a qualitative study Mishuris et al. (2014) explored why the adoption of MyHealthVet has been slow. In interviews with 14 veterans receiving home-based primary care, the authors identified several themes that suggested why usage of MyHealthVet was low. Among those veterans in the sample, knowledge of the platform was low and satisfaction with care was high (suggesting that users did not see a need to use MyHealthVet). Furthermore, the veterans in the sample (which differed from the sample in Tsai and Rosenheck [2012]) had limited Internet and computer access and many had surrogates or caretakers who managed their care. Despite this, once the veterans had learned about MyHealthVet, they expressed great interest in using it (Mishuris et al., 2014).

The committee is not aware of a health outcomes evaluation of MyHealthVet users. However, in a systematic review of patient access to medical records and health outcomes, Davis Giardina et al. (2014) found that despite high patient satisfaction with access to their records, there is little evidence that such access improved outcomes or the quality of care. However, as described above, access to medical records is only one component of MyHealthVet.

Blue Button is a feature of MyHealthVet that allows its users to access their medical histories, medications, past and future appointments, laboratory results, procedures, vitals, and immunization records. It is also used by DoD, the Centers for Medicare & Medicaid Services, and United Healthcare Insurance (Turvey et al., 2014). An online survey of 18,398 MyHealthVet users revealed that 33 percent used the Blue Button feature. Most of the users (73 percent) felt that Blue Button enabled them to understand their health information better because it was all in one place. Interestingly, 20 percent of Blue Button users shared their health information from Blue Button with their non-VA providers—87 percent of whom reported that their non-VA providers found this to be helpful. Veteran computer literacy was the greatest predictor of using Blue Button and sharing information with non-VA providers. Low awareness of Blue Button and difficulty using the feature were the greatest barriers to use revealed by the survey (Turvey et al., 2014).

Mobile Health

Mobile health or “mHealth” technologies are applications for cell phones, smartphones, and tablets that are designed to deliver treatment or to help manage symptoms and care. No one knows how many health apps exist, but these are widely available in the civilian world—for example, as of January 2014 there were nearly 7,000 mental health related apps in the Apple App Store and on Google Play (Breslau and Engel, 2015), while in September 2015, 165,000 total health apps were reported to exist, with mental health apps being the largest group of disease-specific apps (QuintilesIMS, 2015). While very few of the available apps are based on evidence-based treatments (Huguet et al., 2016), there are a handful that deliver CPT and PET. There are also many apps designed to help patients track and manage symptoms associated with PTSD, depression, substance use, and general mental health. Some of these applications, such as the PE Coach and the PTSD Coach, were designed in collaboration with the VA and are in use in some VA settings but not system-wide (Shore et al., 2014). As of June 2017, the VA had developed 15 mobile apps to support mental health care. All 15 are stand-alone and intended for self-help or to be used in conjunction with face-to-face therapy (VA, 2017a).

The VA is currently focused on developing an integrated mobile app that will support mental health symptom monitoring as part of measurement-based care for mental health. It will be the first app to facilitate veteran–provider communications concerning the completion of symptom monitoring assessments. Assessment data will automatically be synced with the veteran’s EHR (VA, 2017a).

Much of the literature on mHealth technologies is descriptive in nature or based on uncontrolled observational methods, making it difficult to determine which applications are most effective or might

be used most effectively in the future. Additionally, the pace of development of mHealth is currently far outpacing the research necessary to determine what is and is not working (Breslau and Engel, 2015; Torous et al., 2016). The quality of available mHealth apps varies greatly, and there is little guidance available for consumers, providers, and decision makers to help in identifying promising new applications (Breslau and Engel, 2015; Huguet et al., 2016; Luxton et al., 2011).

In light of this, a recent commentary provided a framework for clinicians to refer to when considering different psychiatric mHealth in their practices (Torous et al., 2016). The “ASPECTS” framework sets forth six items to consider when evaluating an application for use (although not all items will apply to every application). The framework states that clinicians should consider applications that are actionable (e.g., collect data that is actionable within a health care setting); secure (e.g., have two-step verification and data-encryption features); professional (e.g., should meet professional and Health Insurance Portability and Accountability Act [HIPAA] standards); evidence based (e.g., should have some clinical evidence and efficacy data available); customizable (e.g., should be flexible and applicable to different patient needs); and transparent (e.g., it should be clear how the application works and how it uses patient data).

Although the research base is not yet well developed, research on the effectiveness and acceptability of mobile applications among veterans and providers in the VA system is emerging, and some mHealth apps are showing promising results. PTSD Coach, which helps patients with PTSD manage their symptoms, is widely used in the VA. Users report high acceptability and high perceived helpfulness for the application (Kuhn et al., 2014), and those who use the symptom management tool within the application reported a decrease in distress both initially and after repeated use (Owen and Jaworski, 2015). One small study showed that the application is helpful to veterans with or without clinician support; however, use of the application with clinician support resulted in a greater decrease in symptoms than did self-managed use (Possemato et al., 2016).

In a study of PE Coach, a smartphone app designed as a treatment companion for patients receiving prolonged exposure therapy, most providers agreed that using the app would offer a relative advantage compared to existing PE practices. Generally, study participants felt they could use the app with relative ease and that it was compatible with their values and needs as well as with those of their patients. Clinicians younger than 40, who owned a smartphone, and who had previously used an app in a clinical setting were more receptive to incorporating PE Coach into their care routine than those who were older, did not have a smartphone, and who had not used an mHealth app before (Rickard et al., 2014).

Apps are also available for caregivers for help in managing the care they provide to veterans. In a study of caregivers of veterans and their use of mHealth apps, Frisbee (2016) found that caregivers of veterans with more severe disabilities were less likely to use mHealth apps. Other predictors of greater mHealth application usage were living in a rural location, being younger, having higher computer competence, being a spouse caregiver (as opposed to a parent), and caring for a veteran with a mental health condition (other than PTSD). Rural residence has often been associated with lower mHealth use because of the likelihood of having limited Internet access. However, in this study participants were given a tablet with a service plan, which eliminated this access barrier (Frisbee, 2016).

Godleski et al. (2012a) assessed the outcomes of a home-messaging tele-mental health program. Program participants were Connecticut VA mental health patients with a PTSD, depression, substance use disorder, or schizophrenia diagnosis, and they received a home-messaging device connected to their phone line. Participants received questions daily based on disease management protocols and educational components. Patient responses were sent daily to a nurse practitioner for triage and follow-up if necessary. After at least 6 months of use (before-and-after study design), hospitalizations and emergency room visits decreased significantly; however, there was no comparison group in the study. Participants reported high satisfaction with the program (Godleski et al., 2012a).

Luxton et al. (2011) described current and emerging technologies for suicide prevention. Using Web-based applications and social media (Facebook, Myspace) user groups are ways to engage users and provide access to people in crisis at all times of day. Similarly, podcasting and e-mail outreach are ways to distribute information and reach at-risk populations. The authors also described smartphone apps that help users self-assess and monitor psychiatric symptoms, text messaging services that people in crisis can use to seek help or report incidents, and “virtual worlds” that allow users to interact with each other via avatars and provide suicide prevention information and support. Luxton et al. (2011) noted that many of these technologies and applications were not yet tested and warned that the quality of many technological resources was unregulated.

Other research has explored the use of social networks and virtual reality to help support veterans and engage them in therapy (Parish et al., 2014; Yellowlees et al., 2012a). With virtual reality, researchers have gone as far as creating virtual worlds in which veterans can be immersed and where the experience of, for instance, being a bomb victim, can be re-experienced with a therapist on site (Yellowlees et al., 2012a).

Electronic consultations (e-consults) are asynchronous communication between providers within a shared electronic medical record. E-consults are a relatively new practice at the VA and are used primarily by primary care physicians to seek input from specialty care providers. The practice is designed to increase access to specialty care expertise while avoiding face-to-face visits with specialists. Any provider with ordering privileges may request an e-consult through the EHR. Consulting physicians are expected to respond to an e-consult request within 3 working days (Kessler et al., 2015). Employing e-consults for specialty care improves access by reducing travel burden and cost (Kirsh et al., 2015). E-consults are feasible in a variety of settings, and they facilitate timely specialty advice (Vimalananda et al., 2015). A VA primary care provider located at a CBOC, for example, may e-consult with a specialist located at a VAMC to help a veteran avoid traveling to the VAMC to seek specialty care. Thus, when appropriate, veterans can avoid a potentially time-consuming, expensive, and disruptive trip to the VAMC. Research suggests that e-consults are satisfying to both providers and patients at the VA (Rodriguez and Burkitt, 2015). The study of e-consults is new, however, and limited in the VA setting. The limited research that does exist is not mental health specific. However, it suggests that e-consults appear to be an efficient practice for improving access to care. In FY 2016, 20,938 unique patients received a mental health e-consult. FY 2017 data suggest that the VA is on track to exceed that number this year—as of June 2017, 15,900 unique veterans had received a mental health e-consult (VA, 2017a).

In a mixed-methods study of e-consults in a large VA health center, Gupte and Vimalananda (2016) looked at veterans’ electronic health records and completed semistructured interviews to describe the process, challenges, and usability of e-consults at the VA Boston Healthcare System (VABHS). E-consults launched at VABHS in 2011 and by 2013 had expanded to all clinical services. The study revealed that all specialties used e-consults in 2012 and 2013 with the exception of radiology. A total of 7,097 e-consults were completed in the VABHS during the study period—some of which originated outside the health system. Less than 2 percent of e-consults were for psychiatry or mental health. The analysis was limited to the 5,141 e-consults that originated from within VABHS. Most providers (83 percent) spent less than 15 minutes completing their consult; only 5 percent spent more than 30 minutes. E-consults took a median of 2.2 days to complete. After collecting and analyzing the EHR data, researchers recruited and interviewed a variety of doctors, nurse practitioners, and administrators (N = 31) representing 21 specialties in order to understand barriers and facilitators of e-consult usage. The interviews revealed that some e-consults were requested within the same specialty in order to facilitate appointment scheduling at either VABHS or another facility closer to the veteran’s home. This was not the intended purpose of e-consults, but it suggests that e-consults are filling a structural shortcoming in the VA system. The

authors suggested that the appropriateness of these unintended uses of e-consults should be explored (Gupte and Vimalananda, 2016).

Primary care physicians who were frequent users unanimously agreed that e-consults were easy to use and useful and that they increased access to specialty care (Gupte and Vimalananda, 2016). They also spoke of having more efficient and thorough consultation through e-consults, which largely replaced hallway conversations. Specialists reported that e-consults reduced unnecessary face-to-face consultations and allowed them to have more time with patients who truly needed face-to-face attention. They also reported that e-consults could contribute to primary care education, perhaps reducing the need for specialist consultation in the future. Some specialists did feel overburdened with e-consults, however, and others complained that they often received the same questions from the same primary care physicians, suggesting that some physicians were using e-consults for documentation only and not for true consultation (Gupte and Vimalananda, 2016).

Another form of e-consults, currently known as “asynchronous” or “store and forward” telepsychiatry (ATP), has been developed in recent years (Yellowlees et al., 2010, 2012b, 2013, 2015). ATP consultations are a cross between traditional curbside consults and e-consults. A semi-structured clinical interview between a patient and a physician extender is video recorded, typically 20 to 30 minutes in length, and then sent to a psychiatrist who reviews the interview (which shows the patient’s mental state) and any other clinical information, such as a referral or EHR notes. The psychiatrist writes a diagnostic and treatment plan for the referring primary care physician to follow. Studies have demonstrated feasibility, diagnostic reliability, and cost effectiveness (Butler and Yellowlees, 2012; Yellowlees et al., 2011), and ATP consultations have been implemented in some non-VA systems as part of an integrated mental health service to primary care.

TECHNOLOGICAL BARRIERS IN THE DEPARTMENT OF VETERANS AFFAIRS

A number of barriers limit the potential of tele-mental health within the VA (IOM, 2014). Aside from institutional barriers such as equipment shortages and a lack of computer literacy among providers and veterans, policy barriers exist as well. For example, HIPPA requires a secure platform for providers to e-mail or text message their patients regarding appointment reminders (45 C.F.R., parts 160, 162, and 164), which limits the use of text messaging. Similarly, veterans who would like to receive tele-mental health in their homes must use computer equipment provided by the VA (IOM, 2014). Finally, the provision of equipment and infrastructure to deliver tele-mental health does not necessarily alleviate the staff shortages that may be present at some VA facilities (IOM, 2014).

Site Visit and Survey Findings

Interviewees described numerous technological and bureaucratic challenges regarding the implementation and use of telehealth services at the VA, and the committee’s site visits revealed variability in the knowledge, use, and implementation of telemedicine across the VA system:

One of the biggest challenges is some [veterans] really don’t have the equipment and constant Internet access at their house, and those are the prerequisites to be enrolled in the program. We do have several providers that have used CPT to home on an as-needed basis . . . with certain people who have those capabilities at their house. . . . We are trying to increase it, particularly the CPT to home use, but it does come with its challenges. [Syracuse, New York]

There's all these competencies that you have to be able to do. . . . The other thing is that there is a whole tele-health clerk setup that's not located in the mental health clinic It would be better if you could have a tele-health clerk in the clinic all the time. . . . You need one at every location, and we have two for the system. [Biloxi, Mississippi]

That was one of the first things we worked on when we got here about a year or so ago. . . . We ended up getting an MOU [memorandum of understanding] from the Battle Creek VA, and we brought it here. Then, it just died on the vine. It went to lawyers, and it never came out. [Battle Creek, Michigan]

These barrier examples are unfortunate but not surprising, as the literature shows that patients have a higher rate of preference for telemedicine consultations than do providers (Hubley et al., 2016). The latter tend to have to make more changes to their practices to deliver telemedicine consultations, and they obtain fewer advantages than patients. One of the tasks of any telemedicine implementation is to convince providers to change their approach to care delivery, and this is evidently still a challenge within many parts of the VA. The committee's survey data detailed in Chapter 6 (Table 6-35) showed that a large proportion (45 percent) of veterans of all ages indicated they would be willing to use the Internet to receive mental health services in the future. Veterans in younger age groups (17 to 29, 30 to 39, and 40 to 49) in the OEF/OIF/OND cohort were more willing to use the Internet to access mental health care in the future than veterans 50 and older (see Chapter 6, Table 6-36). While the survey did not inquire about attitudes to technology of rural or geographically isolated veterans, the literature is clear that these individuals typically show high satisfaction with receiving their care electronically (Yellowlees and Shore, in press). To further maximize the benefits of health technology, the VA needs greater buy-in from local leaders, providers, and veterans so that the technologies become a standard part of routine care, often used in a hybrid way combined with in-person care to give veterans more choice and access to mental health expertise.

SUMMARY

This chapter describes the state of health technology at the VA as well as some of the barriers throughout the system that may inhibit the wider use of health technology among veterans and providers. It also summarizes committee site visits and survey findings related to health technology. A summary of the committee's findings on this topic is outlined below.

- The VA is a pioneer in the implementation of telehealth and other clinically related technologies, such as the EHR, and processes to deliver mental health care.
- The VA's substantial past expenditure on electronic and telehealth infrastructure demonstrates the department's commitment to using technology to deliver care.
- The VA also is a pioneer in tele-mental health research and app development.
- While there is now a strong evidence base supporting the use of tele-mental health technologies for PTSD and depression, long-term outcome studies are needed for the use of tele-mental health for other conditions.
- Further research also is needed for the use of tele-mental health for evidence-based therapies, within primary care and integrated care systems, for delivery in the home and in mobile settings, and for technologies other than video conferencing, such as the effectiveness of smartphone applications and virtual reality.

- The VA currently delivers clinical telehealth services across all disciplines to up to 12 percent of all veterans using VA services, with approximately 25 percent of these services being for mental health.
- In most facilities, the VA is technologically equipped to provide tele-mental health services; however, the committee's site visits revealed variability in the knowledge, use, and implementation of telemedicine across the VA system.
- Nearly half of veterans surveyed by the committee were open to receiving mental health care electronically in the future.
 - Distance barriers experienced by these veterans may be overcome through the use of telehealth.

REFERENCES

- Antonacci, D. J., R. M. Bloch, S. A. Saeed, Y. Yildirim, and J. Talley. 2008. Empirical evidence on the use and effectiveness of telepsychiatry via videoconferencing: Implications for forensic and correctional psychiatry. *Behavioral Sciences & the Law* 26(3):253–269.
- Bashshur, R. L., G. W. Shannon, N. Bashshur, and P. M. Yellowlees. 2016. The empirical evidence for telemedicine interventions in mental disorders. *Telemedicine Journal and E-Health* 22(2):1–27.
- Breslau, J., and C. C. Engel. 2015. *Information and communication technologies in behavioral health: A literature review with recommendations for the Air Force*. Santa Monica, CA: RAND Corporation.
- Butler, T. N., and P. Yellowlees. 2012. Cost analysis of store-and-forward telepsychiatry as a consultation model for primary care. *Telemedicine Journal and E-Health* 18(1):74–77.
- Chan, S., M. Parish, and P. Yellowlees. 2015. Telepsychiatry today. *Current Psychiatry Reports* 17(11):89.
- Clancy, C. 2015. Statement of Dr. Carolyn Clancy, Interim Under Secretary for Health, Veterans Health Administration, Department of Veterans Affairs, for presentation before the Senate Committee on Appropriations, Subcommittee on Military Construction, Veterans Affairs, and Related Agencies. <https://www.appropriations.senate.gov/download/interim-under-secretary-clancy-testimony> (accessed November 8, 2017).
- CMS (Centers for Medicare & Medicaid Services). 2017. *Electronic health records*. <https://www.cms.gov/Medicare/E-Health/EHealthRecords/index.html?redirect=/ehealthrecords> (accessed January 17, 2017).
- Commission on Care. 2016. *Final report of the Commission on Care*. Washington, DC: Commission on Care.
- Darkins, A., S. Kendall, E. Edmonson, M. Young, and P. Stessel. 2014. Reduced cost and mortality using home telehealth to promote self-management of complex chronic conditions: A retrospective matched cohort study of 4,999 veteran patients. *Telemedicine Journal and E-Health* 20:1–8.
- Davis Giardina, T., S. Menon, D. E. Parrish, D. F. Sittig, and H. Singh. 2014. Patient access to medical records and healthcare outcomes: A systematic review. *Journal of the American Medical Informatics Association* 21(4):737–741.
- Engel, C. C., L. H. Jaycox, M. C. Freed, R. M. Bray, D. Brambilla, D. Zatzick, B. Litz, T. Tanielian, L. A. Novak, M. E. Lane, B. E. Belsher, K. L. Olmsted, D. P. Evatt, R. Vandermaas-Peeler, J. Unutzer, and W. J. Katon. 2016. Centrally assisted collaborative telecare for posttraumatic stress disorder and depression among military personnel attending primary care: A randomized clinical trial. *JAMA Internal Medicine* 176(7):948–956.
- Fortney, J. C., J. M. Pyne, T. A. Kimbrell, T. J. Hudson, D. E. Robinson, R. Schneider, W. M. Moore, P. J. Custer, K. M. Grubbs, and P. P. Schnurr. 2015. Telemedicine-based collaborative care for posttraumatic stress disorder: A randomized clinical trial. *JAMA Psychiatry* 72(1):58–67.
- Frisbee, K. L. 2016. Variations in the use of mHealth tools: The VA mobile health study. *JMIR mHealth and uHealth* 4(3):e89.
- Frueh, B., J. Monnier, E. Yim, A. L. Grubaugh, M. B. Hamner, and R. G. Knapp. 2007. A randomized trial of telepsychiatry for post-traumatic stress disorder. *Journal of Telemedicine & Telecare* 13(3):142–147.
- GAO (Government Accountability Office). 2016. *VA's efforts raise concerns about interoperability goals and measures, duplication with DOD, and future plans: Statement of Valerie C. Melvin, director, information management and technology resources issues*. Washington, DC: Government Accountability Office.
- Garber, S., S. M. Gates, E. B. Keeler, M. E. Vaiana, A. W. Mulcahy, C. Lau, and A. L. Kellermann. 2014. *Redirecting innovation in U.S. health care: Options to decrease spending and increase value (case studies)*. Santa Monica, CA: RAND Corporation.
- Godleski, L. 2012. A comprehensive national telemental health training program. *Academic Psychiatry* 36(5):408–410.

- Godleski, L. 2014. *Telemental health in VA: Laying the groundwork for opportunities to access to cognitive behavioral therapy for pain, part 1*. Washington, DC: Department of Veterans Affairs.
- Godleski, L., D. Cervone, D. Vogel, and M. Rooney. 2012a. Home telemental health implementation and outcomes using electronic messaging. *Journal of Telemedicine & Telecare* 18(1):17–19.
- Godleski, L., A. Darkins, and J. Peters. 2012b. Outcomes of 98,609 U.S. Department of Veterans Affairs patients enrolled in telemental health services, 2006–2010. *Psychiatric Services* 63(4):383–385.
- Gros, D. F., M. Yoder, P. W. Tuerk, B. E. Lozano, and R. Acierno. 2011. Exposure therapy for PTSD delivered to veterans via telehealth: Predictors of treatment completion and outcome and comparison to treatment delivered in person. *Behavioral Therapy* 42(2):276–283.
- Grubbs, K. M., J. C. Fortney, T. Dean, J. S. Williams, and L. Godleski. 2015a. A comparison of mental health diagnoses treated via interactive video and face to face in the veterans healthcare administration. *Telemedicine Journal and E-Health* 21(7):1–3.
- Grubbs, K. M., J. C. Fortney, J. M. Pyne, T. Hudson, W. M. Moore, P. Custer, R. Schneider, and P. P. Schnurr. 2015b. Predictors of initiation and engagement of cognitive processing therapy among veterans with PTSD enrolled in collaborative care. *Journal of Traumatic Stress* 28(6):580–584.
- Gupte, G., and V. Vimalananda. 2016. Disruptive innovation: Implementation of electronic consultations in a Veterans Affairs health care system. *JMIR Medical Informatics* 4(1):e6.
- Hilty, D. M., D. C. Ferrer, M. B. Parish, B. Johnston, E. J. Callahan, and P. M. Yellowlees. 2013. The effectiveness of telemental health: A 2013 review. *Telemedicine Journal and E-Health* 19(6):444–454.
- Hubley, S., S. B. Lynch, C. Schneck, M. Thomas, and J. Shore. 2016. Review of key telepsychiatry outcomes. *World Journal of Psychiatry* 6(2):269–282.
- Huguet, A., S. Rao, P. J. McGrath, L. Wozney, M. Wheaton, J. Conrod, and S. Rozario. 2016. A systematic review of cognitive behavioral therapy and behavioral activation apps for depression. *PLoS One* 11(5):e0154248.
- IOM (Institute of Medicine). 1996. *Telemedicine: A guide to assessing telecommunications for health care*. Washington, DC: National Academy Press.
- IOM. 2014. *Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment*. Washington, DC: Institute of Medicine.
- Kessler, R. C., C. H. Warner, C. Ivany, M. V. Petukhova, S. Rose, E. J. Bromet, M. Brown, 3rd, T. Cai, L. J. Colpe, K. L. Cox, C. S. Fullerton, S. E. Gilman, M. J. Gruber, S. G. Heeringa, L. Lewandowski-Romps, J. Li, A. M. Millikan-Bell, J. A. Naifeh, M. K. Nock, A. J. Rosellini, N. A. Sampson, M. Schoenbaum, M. B. Stein, S. Wessely, A. M. Zaslavsky, and R. J. Ursano. 2015. Predicting suicides after psychiatric hospitalization in U.S. Army soldiers: The Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry* 72(1):49–57.
- Kirsh, S., E. Carey, D. C. Aron, O. Cardenas, G. Graham, R. Jain, D. H. Au, C. L. Tseng, H. Franklin, and P. M. Ho. 2015. Impact of a national specialty e-consultation implementation project on access. *American Journal of Managed Care* 21(12):e648–e654.
- Kizer, K. W. 2011. The emerging era of virtual healthcare. Paper read at VHA Visioning Summit on Virtual Health Care Delivery, October 13, 2010, Arlington, VA.
- Kuhn, E., C. Greene, J. Hoffman, T. Nguyen, L. Wald, J. Schmidt, K. M. Ramsey, and J. Ruzek. 2014. Preliminary evaluation of PTSD Coach, a smartphone app for post-traumatic stress symptoms. *Military Medicine* 179(1):12–18.
- Luxton, D. D., J. D. June, and J. T. Kinn. 2011. Technology-based suicide prevention: Current applications and future directions. *Telemedicine Journal and E-Health* 17(1):50–54.
- Mishuris, R. G., M. Stewart, G. M. Fix, T. Marcello, D. K. McInnes, T. P. Hogan, J. B. Boardman, and S. R. Simon. 2014. Barriers to patient portal access among veterans receiving home-based primary care: A qualitative study. *Health Expectations* 18(6):2296–2305.
- MITRE Corporation. 2015. *Assessment H (health information technology)*.
- Morland, L. A., C. J. Greene, C. S. Rosen, D. Foy, P. Reilly, J. Shore, Q. He, and B. C. Frueh. 2010. Telemedicine for anger management therapy in a rural population of combat veterans with posttraumatic stress disorder: A randomized noninferiority trial. *Journal of Clinical Psychiatry* 71(7):855–863.
- Morland, L. A., A. K. Hynes, M.-A. Mackintosh, P. A. Resick, and K. M. Chard. 2011. Group cognitive processing therapy delivered to veterans via telehealth: A pilot cohort. *Journal of Traumatic Stress* 24(4):465–469.
- Morland, L. A., M. A. Mackintosh, C. J. Greene, C. S. Rosen, K. M. Chard, P. Resick, and B. C. Frueh. 2014. Cognitive processing therapy for posttraumatic stress disorder delivered to rural veterans via telemental health: A randomized noninferiority clinical trial. *Journal of Clinical Psychiatry* 75(5):470–476.

- Morland, L. A., M. A. Mackintosh, C. S. Rosen, E. Willis, P. Resick, K. Chard, and B. C. Frueh. 2015. Telemedicine versus in-person delivery of cognitive processing therapy for women with posttraumatic stress disorder: A randomized noninferiority trial. *Depression and Anxiety* 32(11):811–820.
- Myers, K., A. Vander Stoep, C. Zhou, C. A. McCarty, and W. Katon. 2015. Effectiveness of a telehealth service delivery model for treating attention-deficit/hyperactivity disorder: A community-based randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry* 54(4):263–274.
- Nazi, K. M., T. P. Hogan, D. K. McInnes, S. S. Woods, and G. Graham. 2013. Evaluating patient access to electronic health records: Results from a survey of veterans. *Medical Care* 51(3 Suppl 1):S52–S56.
- Owen, J. E., and B. K. Jaworski. 2015. Mhealth in the wild: Using novel data to examine the reach, use, and impact of PTSD Coach. *JMIR Mental Health* 2(1):e7.
- Pakyurek, M., P. Yellowlees, and D. Hilty. 2010. The child and adolescent telepsychiatry consultation: Can it be a more effective clinical process for certain patients than conventional practice? *Telemedicine Journal and E-Health* 16(3):289–292.
- Parish, M. B., M. Apperson, and P. M. Yellowlees. 2014. Engaging U.S. veterans with PTSD in online therapy. *Psychiatric Services* 65(5):697.
- Pietrzak, R. H., D. C. Johnson, M. B. Goldstein, J. C. Malley, and S. M. Southwick. 2009. Perceived stigma and barriers to mental health care utilization among OEF–OIF veterans. *Psychiatric Services* 60(8):1118–1122.
- Possemato, K., E. Kuhn, E. Johnson, J. E. Hoffman, J. E. Owen, N. Kanuri, L. De Stefano, and E. Brooks. 2016. Using PTSD Coach in primary care with and without clinician support: A pilot randomized controlled trial. *JMIR Mental Health* 38:94–98.
- QuintilesIMS. 2015. *IMS Health study: Patient options expand as mobile healthcare apps address wellness and chronic disease treatment needs*. <http://www.imshealth.com/en/about-us/news/ims-health-study:-patient-options-expand-as-mobile-healthcare-apps-address-wellness-and-chronic-disease-treatment-needs> (accessed June 16, 2017).
- Rickard, N., E. Kuhn, A. Eftekhari, J. E. Hoffman, J. J. Crowley, K. M. Ramsey, G. M. Reger, and J. I. Ruzek. 2014. Clinician perceptions of using a smartphone app with prolonged exposure therapy. *JMIR Mental Health* 41(6):800–807.
- Rodriguez, K. L., and K. H. Burkitt. 2015. Veteran, primary care provider, and specialist satisfaction with electronic consultation. *JMIR Medical Informatics* 3(1):e5.
- Shore, J. H., M. Aldag, F. L. McVeigh, R. L. Hoover, R. Ciulla, and A. Fisher. 2014. Review of mobile health technology for military mental health. *Military Medicine* 179(8):865–878.
- Teich, J., M. M. Ali, S. Lynch, and R. Mutter. 2016. Utilization of mental health services by veterans living in rural areas. *Journal of Rural Health* 33(3):297–304.
- Torous, J. B., S. R. Chan, P. M. Yellowlees, and R. Boland. 2016. To use or not? Evaluating aspects of smartphone apps and mobile technology for clinical care in psychiatry. *Journal of Clinical Psychiatry* 77(6):e734–e738.
- Tsai, J., and R. A. Rosenheck. 2012. Use of the internet and an online personal health record system by U.S. veterans: Comparison of Veterans Affairs mental health service users and other veterans nationally. *Journal of the American Medical Informatics Association* 19(6):1089–1094.
- Tuerk, P. W., M. Yoder, K. J. Ruggiero, D. F. Gros, and R. Acierno. 2010. A pilot study of prolonged exposure therapy for posttraumatic stress disorder delivered via telehealth technology. *Journal of Traumatic Stress* 23(1):116–123.
- Turvey, C., D. Klein, G. Fix, T. P. Hogan, S. Woods, S. R. Simon, M. Charlton, M. Vaughan-Sarrazin, D. M. Zulman, L. Dindo, B. Wakefield, G. Graham, and K. Nazi. 2014. Blue Button use by patients to access and share health record information using the Department of Veterans Affairs' online patient portal. *Journal of the American Medical Informatics Association* 21(4):657–663.
- VA (Department of Veterans Affairs). 2014. *Mobile app: PTSD Coach*. <http://www.ptsd.va.gov/public/materials/apps/PTSDCoach.asp> (accessed November 17, 2014).
- VA. 2016. *VA announces telemental health clinical resource centers during telemedicine association gathering*. Washington, DC: Department of Veterans Affairs.
- VA. 2017a. *Response to committee request for information*. Department of Veterans Affairs.
- VA. 2017b. *VA secretary announces decision on next-generation electronic health record*. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2914> (accessed June 8, 2017).
- Vimalananda, V. G., G. Gupte, S. M. Seraj, J. Orlander, D. Berlowitz, B. G. Fincke, and S. R. Simon. 2015. Electronic consultations (e-consults) to improve access to specialty care: A systematic review and narrative synthesis. *Journal of Telemedicine and Telecare* 21(6):323–330.
- Wong, E. C., G. N. Marshall, V. Shetty, A. Zhou, H. Belzberg, and D. D. Yamashita. 2007. Survivors of violence-related facial injury: Psychiatric needs and barriers to mental health care. *General Hospital Psychiatry* 29(2):117–122.
- Yellowlees, P., and J. H. Shore, eds. In press. *Telepsychiatry and health technologies: A guide for mental health professionals*. Arlington, VA: American Psychiatric Press.

- Yellowlees, P., A. Odor, K. Patrice, M. B. Parish, N. Nafiz, A. M. Iosif, and D. Hilty. 2011. Disruptive innovation: The future of healthcare? *Telemedicine Journal and E-Health* 17(3):231–234.
- Yellowlees, P., S. Richard Chan, and M. Burke Parish. 2015. The hybrid doctor–patient relationship in the age of technology—Telepsychiatry consultations and the use of virtual space. *International Review of Psychiatry* 27(6):476–489.
- Yellowlees, P. M., A. Odor, M. B. Parish, A. M. Iosif, K. Haught, and D. Hilty. 2010. A feasibility study of the use of asynchronous telepsychiatry for psychiatric consultations. *Psychiatric Services* 61(8):838–840.
- Yellowlees, P. M., K. M. Holloway, and M. B. Parish. 2012a. Therapy in virtual environments—clinical and ethical issues. *Telemedicine Journal and E-Health* 18(7):558–564.
- Yellowlees, P. M., A. Odor, and M. B. Parish. 2012b. Cross-lingual asynchronous telepsychiatry: Disruptive innovation? *Psychiatric Services* 63(9):945.
- Yellowlees, P. M., A. Odor, A. M. Iosif, M. B. Parish, N. Nafiz, K. Patrice, G. Xiong, R. McCaron, R. Sanchez, E. Ochoa, and D. Hilty. 2013. Transcultural psychiatry made simple—Asynchronous telepsychiatry as an approach to providing culturally relevant care. *Telemedicine Journal and E-Health* 19(4):259–264.
- Yuen, E. K., D. F. Gros, M. Price, S. Zeigler, P. W. Tuerk, E. B. Foa, and R. Acierno. 2015. Randomized controlled trial of home-based telehealth versus in-person prolonged exposure for combat-related PTSD in veterans: Preliminary results. *Journal of Clinical Psychology* 71(6):500–512.

Quality Management

The concept of value-based health care is shaping the strategies that U.S. health care systems are using to deliver and manage patient care. Value-based health systems seek to provide quality care along various dimensions of quality (for example, safe, effective, and patient centered), with optimal results, at reasonable cost. Measuring health system performance by the structures, processes, and outcomes of the care and services provided—and using the results to inform effective organizational change—is integral to achieving the aims of quality and value. In addition, accessible, high-quality care that is consistently and reliably provided throughout the system depends on a health system’s capacity to harness, implement, and evaluate best practices that have been identified through measurement-based care strategies.

This chapter describes the programs that the Department of Veterans Affairs (VA) uses for monitoring the quality of its mental health care and for ensuring the adoption of best clinical practices by VA providers. The committee did not assess the merits of the individual performance indicators the VA uses for quality management nor did it collect data for those indicators. Incorporating that information into the report in a meaningful way was beyond the available time and resources for this study, which focused on the collection and analysis of survey and site visit data and assessment of the literature as stated in the study charge.

QUALITY MEASUREMENT

Background

In health systems, systematic quality measurement is necessary for quality improvement, accountability and transparency, and informed decision making by patients. A well-defined and coordinated set of quality measures using administrative, clinical, and patient-reported data is necessary to track and improve clinical care quality and value. Derived from evidence-based practice guidelines, quality measures assess a health system’s performance in terms of its organizational structure, its care processes,

and, ultimately, its patient outcomes (Donabedian, 1988). In the Donabedian framework for assessing the quality of care, *structure* refers to the attributes of the settings in which care is provided, such as type/level of staffing, how many patients can be served, hours of operation, provider workloads, and availability of evidence-based practices. *Process* refers to the delivery of patient care in relation to clinical standards, for example, whether and how evidence-based practices are implemented, appropriate side-effect monitoring, and the frequency and timing of services. *Outcomes* are the effects of care on the health status of patients, which may be assessed by symptom severity, patient satisfaction, quality of life, and functional status. Patient outcomes are influenced by both the structure of care and the process of care.

Quality measures can apply to various levels of a health care system, such as hospitals, clinics, and clinicians. Administrative databases, patient medical records, and patient surveys are common data sources for quality measures. To identify gaps in quality and hold systems accountable for improvements, performance measures have been increasingly used in health care to compare processes of care against standards and benchmarks at the organizational, local, regional, and national levels (Kilbourne et al., 2010). The use of measures to improve care quality and health outcomes and deliver value-driven care requires data with a high degree of validity and reliability. Standardized measure definitions and data collection procedures give assurance that the results represent actual performance. The National Quality Forum (NQF), a private, nonprofit organization, was established in 1999 for the purposes of fostering consensus about standardized health care performance measures, reporting mechanisms, and a national strategy for quality improvement (Kizer, 2001). NQF has created a platform for consistent data collection and reporting, and it endorses measures meeting its measurement standards¹ (NQF, 2016). NQF-endorsed measures are widely used in public reporting, quality improvement, and payment programs.

Mental Health Care Measurement Gaps

Few fully validated and reliable measures now exist for mental health care. More than 600 NQF-endorsed measures exist, but only a small proportion—38 measures—addresses adult mental health care.² At the federal level, the Patient Protection and Affordable Care Act (ACA) has provisions supporting the development of performance measurement for greater quality, value, and safety in health care and promoting the collection of more extensive health information from public and private insurers (Rosenbaum, 2011). ACA activities intended to broaden the breadth of mental health care measures include the National Behavioral Health Quality Framework (SAMHSA, 2016) and the creation of a core set of standardized mental health measures for voluntary use by state Medicaid programs (CMS, 2016).

Since the 1990s, when the science of measurement for evaluating health care quality started being developed (Burstin et al., 2016), care in the general medical and surgical sectors has seen important quality gains in such areas as wellness screenings, diabetes care, and cardiovascular care (NCQA, 2015). However, gaps in mental health quality persist, and there has been a call for more focused efforts to develop measures, more dedication of resources, and greater leadership commitment (IOM, 2006; Pincus et al., 2011). More measures are needed that are aimed at psychosocial interventions, in particular to determine whether components of effective care are actually delivered to patients in these interventions. Improving Access to Psychological Therapies in Britain is one model for measurement in the area of psychosocial interventions (Pincus et al., 2016). Another important area to address is the development of better quality measures that assess mental health and general medicine integration (Pincus et al., 2016).

¹NQF uses five criteria to determine whether a measure is suitable for endorsement: (1) importance to measure and report, (2) scientific acceptability of measure properties, (3) feasibility, (4) usability and use, and (5) comparison to related or competing measures.

²See http://www.qualityforum.org/Measures_Reports_Tools.aspx (accessed September 20, 2016).

One recent study (Farmer et al., 2016) developed prototype longitudinal electronic population-based measures of depression care suitable for evaluating the VA's collaborative care management initiative at the primary care practice-site level.

Patient outcome measures are vital to the advancement of mental health quality efforts. Very few patient outcome measures exist, which is a significant obstacle in understanding effective mental care (IOM, 2006). In addition, in order to meet expectations of value in health care, mental health measurement and monitoring need to move in the direction of evaluating access, quality, and outcomes in the context of the costs to deliver that care (Schmidt et al., 2017).

MENTAL HEALTH CARE QUALITY MEASUREMENT IN THE DEPARTMENT OF VETERANS AFFAIRS SYSTEM

The VA was at the forefront of the health care quality movement in the 1990s when rapid changes in measurement-based care started to emerge in the health care industry. Managed care systems transformed health care delivery through innovations in care coordination, health data and information technology, standardized care, performance standards, cost-containment strategies, and new incentives to drive provider and patient behaviors. During this time, the VA made it a priority to build a health system-wide infrastructure for managing performance, improving clinical care, and driving accountability, and the efforts produced demonstrable results (Kizer et al., 2000). Nearly 30 years later, some of these early programs and strategies have evolved and have continued to serve as valuable assets in the VA's health care quality improvement infrastructure.

An overarching recommendation in the recent Independent Assessment of the Health Care Delivery Systems and Management Processes of the Department of Veterans Affairs was that the VA must adopt systems thinking to address problems of access, quality, cost, and patient experience (MITRE Corporation, 2015). Notably, the VA purchased care programs and veteran access and wait times—which have consequences for mental health delivery—are two areas evaluators described as failing to have a cohesive strategy that would connect solutions to broader organizational aims (IOM, 2015; RAND Corporation, 2015). The evaluators cautioned against tackling these problems independently because it can foster sub-optimal, non-scalable, and non-sustainable solutions (MITRE Corporation, 2015). With this in mind, the committee believes performance information about the VA's purchased care programs is a necessary component of a comprehensive quality improvement strategy for mental health. However, to the committee's knowledge, there has been no systematic data collection and analysis of the quality of care or timeliness of care veterans receive through the Veterans Choice program (IOM, 2015; RAND Corporation, 2015).

The Veterans Health Administration's (VHA's) Office of Mental Health and Suicide Prevention (OMHSP) provides system-wide oversight of VA mental health care quality. OMHSP data systems and quality improvement guidance provide support to facility program managers responsible for using quality performance data and managing results (Trafton et al., 2013). The VA has a suite of performance information systems to monitor mental health care access and quality as well as to support opportunities for quality improvement (Schmidt et al., 2017). Some of the major data systems are described below.

Mental Health Information System

The Mental Health Information System (MHIS) is a system of over 200 clinical quality and process-of-care measures that was designed to monitor the implementation of the requirements contained in the Uniform Mental Health Services Handbook, a guiding policy document that details the requirements for mental health clinical care delivery within the VA (VA, 2015). MHIS measures are aimed at local

facility program managers and are intended to support quality improvement at each hospital or clinic (Trafton et al., 2013).

Recently, the limitations of relying on the numerous individual, locally focused MHIS measures for quality improvement have been recognized. The shortcomings identified include a lack of measure focus, questionable measure quality, limited alignment between MHIS performance and broader system goals, the presence of substantial variability in facility performance, and a need to examine the allocation of resources necessary for quality improvement (Kizer and Jha, 2014; Lemke et al., 2017; Schmidt et al., 2017).

Strategic Analytics for Improvement and Learning

In 2015, to encourage greater management engagement with and support of mental health programming and improvement, the VA added a set of mental health care measures to Strategic Analytics for Improvement and Learning (SAIL), an informatics system that had been previously established to monitor clinical quality (Lemke et al., 2017). SAIL is the VA's system for measuring and benchmarking health care quality and efficiency at individual VA medical centers (VAMCs), and for enhancing the identification of quality improvement opportunities. To promote accountability, SAIL outcomes are included in every VAMC director's performance evaluation.

SAIL includes a range of measures important for addressing access to care, the quality of health care, employee perception about the organization, nursing turnover, and efficiency. For example, the access domain includes a measure about wait times to mental health appointments. A mental health domain consists of three component scores (composites), each composed of multiple individual measures, that monitor the population coverage, the continuity of care, and the experience of care. Population coverage examines the proportion of potentially indicated patients who receive services. The continuity of care examines the likelihood of the receipt of follow-up or coordinated care. The experience of care examines veteran and mental health provider satisfaction with access and quality. The data are from two VA surveys, the Veteran Satisfaction Survey (VSS)³ and the Mental Health Provider Survey. The VSS is an annual survey consisting of a 30-item instrument that is administered by mail to veterans seen at VA health facilities. The VA executes the samples and mailings at 2-week intervals throughout the year and it reports the results for a particular year. The survey response rates are approximately 20 to 25 percent, which requires the VA to mail approximately 50,000 surveys annually in effort to reach a goal of 10,000 completed surveys per calendar year (VA, 2016d). The VA's annual survey of mental health providers is a web-based survey of all mental health providers. In 2015, the VA reported there were 25,879 filled mental health clinical positions and that more than 8,700 survey respondents completed the survey, for a response rate of 34 percent (VA, 2016e). Greater detail about the three SAIL mental health composites and the measures can be found in Lemke et al. (2017).

To assist program managers with SAIL performance improvement strategies, the Office of Mental Health and Suicide Prevention has subject-matter experts assigned to each Veterans Integrated Service Network (VISN) and facility. Since fiscal year (FY) 2016, approximately 50 face-to-face site visits and five virtual site visits have been provided to the facilities. Ongoing training sessions are provided for sites with lower SAIL performance; and training visits can also be arranged in response to site-specific requests (VA, 2017c). The VA reported to this committee that facilities that started FY 2016 with poorer access and quality have generally improved, while those facilities with excellent access and quality have generally maintained their performance over the course of the year (VA, 2017c).

³Questions in the VSS are adapted from the Consumer Assessment of Healthcare Providers and Systems and the VA's Survey of Healthcare Experiences of Patients.

Mental Health Management System

The VA created the Mental Health Management System (MHMS) to support a value-driven mental health system from a broader systems perspective. The MHMS uses clinical and organizational data to provide objective information for making decisions about which facilities get what resources, when, and how much and for engaging facility, VISN, and senior leadership in continuous quality improvement. The MHMS provides facility summary data on SAIL performance (described above), access, productivity, staffing, satisfaction, and programming (VA, 2017c). There are major limitations, however, such as that cost data and patient outcomes are not components of the MHMS (Schmidt et al., 2017).

Figure 15-1 shows the MHMS framework for assessing access and quality (Schmidt et al., 2017). The MHMS includes 20 structure and efficiency measures related to the six potential drivers of access and quality that are shown in Figure 15-1. For example, wait time is one of the drivers, so one of the measures captures the proportion of patients who receive outpatient mental health care within 30 days of their preferred dates. The MHMS also has measures addressing tele-mental health, primary care–mental health integration (PC-MHI); and the Behavioral Health Interdisciplinary Program (BHIP), which influence the drivers of access and quality. For example, specific MHMS calculates the ratio of the number of tele-mental health patients to the number of total mental health outpatients in a facility, the ratio of PC-MHI patients to the total number of primary care patients, and whether the level of patient and provider involvement in BHIP is within the intended range.

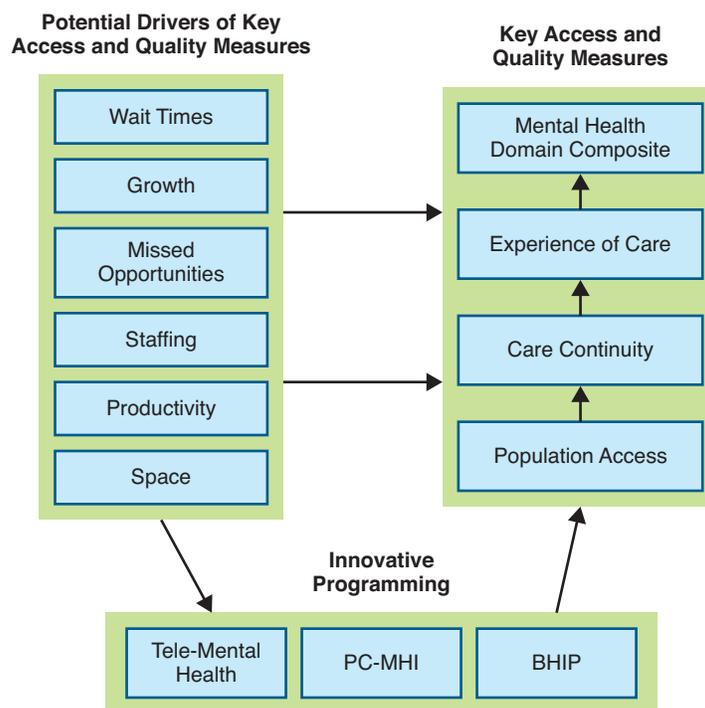


FIGURE 15-1 VHA Mental Health Management System framework.
 NOTE: PC-MHI = primary care–mental health integration; BHIP = Behavioral Health Interdisciplinary Program.
 SOURCE: Schmidt et al., 2017.

Schmidt et al. (2017) conducted a study of the MHMS that examined performance on 31 measures calculated for all U.S. VA health care facilities ($N = 139$). Overall, the researchers found that performance varied across facilities on MHMS measures. The analysis revealed that better access to care was significantly associated with fewer mental health provider staffing vacancies ($r = 0.24$), with higher staff-to-patient ratios for psychiatrists ($r = 0.19$) and other outpatient mental health providers ($r = 0.27$). In addition, higher staff-to-patient ratios were significantly associated with higher performance on a number of patient and provider satisfaction measures (range of $r = 0.18$ – 0.51) and continuity-of-care measures (range of $r = 0.26$ – 0.43). The researchers reported that the MHMS data about health system performance can be useful in VA management discussions about solutions to common problems such as challenges in management and organization, issues related to geography and location, and under-resourcing. The reported limitations of the MHMS included the lack of available patient outcome measures and cost data, and low veteran and provider survey response rates; however, it is noted that these are not unique to the VHA (Schmidt et al., 2017).

Patient Outcome Data

None of the data systems for assessing health care performance described above—MHIS, SAIL, MHMS—collects and uses standardized patient outcome data. Yet, ongoing monitoring of patient symptoms is essential to the assessment and improvement of patient care. The VA has reported that by 2018 it will complete the development of the first phase of a comprehensive system, the Mental Health Quality and Clinical Outcomes Reporting System, to monitor health outcomes with standardized patient-reported outcome measures (VA, 2016a).

Public Reporting

In support of transparency, accountability, improvement, and patient-centered care, the VA publicly reports facility-level performance on the SAIL measures, which include access and mental health domains (VA, 2016c). Data tables on the VA's web site give the facility score, the benchmark for the measure, and 10th, 50th, and 90th percentile scores. On an overall measure of quality, each VAMC is compared to other VAMCs using a 1- to 5-star rating system. The VA updates the SAIL reports quarterly and has also indicated an intention to report a VAMC's performance compared to its previous year's performance (VA, 2016c).

Consumer-friendly reports are available for veterans and other lay readers interested in seeing results on VA quality measures. The VA's website has a searchable database⁴ from which veterans can get a facility's star rating on several quality measures (VA, 2016b). One of the measures is related to routine mental health screening, which assesses whether veterans are appropriately screened for alcohol misuse, depression, and posttraumatic stress disorder (PTSD) at the required intervals and, if positive, receive appropriate follow-up evaluations (VA, 2016b). Another VA website⁵ presents information on such measures as wait times and patient satisfaction. In addition, the VA reports performance measures on the Medicare Hospital Compare website,⁶ which allows for the comparison of VA facilities with hospitals in the private sector.

⁴See <https://www.va.gov/QUALITYOFCARE/apps/mcpc-app.asp>.

⁵See <http://www.accessocare.va.gov>.

⁶See <https://www.medicare.gov/hospitalcompare>.

QUALITY IMPROVEMENT INNOVATIONS

Identifying and spreading best practices can be a major driver of providing consistent, high-quality health care for veterans. The VA has been making advances in research into best practices and also the dissemination of the best practices it has learned and is continuing to learn since the wars in Iraq and Afghanistan began. In addition to its work on performance measurement, as described above, the VA has an array of centers and initiatives that support its mental health services through evaluation, research, and clinical support. Chapter 3 describes a number of the key centers and initiatives. Many activities undertaken by the VA are related to improving the implementation of evidence-based therapies and evaluating outcomes at the program, facility, and regional levels. For example, the VA's Northeast Program Evaluation Center has broad responsibilities within OMHSP to evaluate VA mental health care programs, including those for specialized treatment of PTSD.

As demonstrated in the review of mental health delivery in Chapter 11, research shows that within the health care industry—and within the VA specifically—the adoption of evidence-based treatments into clinical practice is suboptimal. The field of implementation science is seeking to understand the barriers and facilitators affecting the implementation strategies that successfully integrate research science into health care practice and policy (Cook and Wiltsey-Stirman, 2015). Along these lines, the VA's Quality Enhancement Research Initiative and Diffusion of Excellence Initiative are resources that support the provision of effective care and the use of best practices.

Quality Enhancement Research Initiative

As described in Chapter 3, the mission of the VA's Quality Enhancement Research Initiative (QUERI) is to improve the health of veterans by supporting the more rapid implementation of effective clinical practices into routine care and by evaluating the results of those efforts. The QUERI program consists of 15 interdisciplinary programs involving cross-cutting partnerships to achieve VA national health care priority goals and specific implementation strategies. In the area of mental health, for example, the QUERI for Team-Based Behavioral Health (in Little Rock, Arkansas) focuses on how team-based behavioral health care can be improved through the use of implementation facilitation strategies, with anticipated improvements in veteran outcomes. The mission of the Center for Mental Health and Outcomes Research (located in North Little Rock, Arkansas) is “to optimize outcomes for veterans by conducting innovative research to improve access to and engagement in evidence-based mental health and substance use care” (VA, 2017a). Its focus is research aimed at improving mental health care for rural veterans. There is also a Care Coordination QUERI (in Los Angeles, California) that aims to learn how to improve coordination between the veteran, his or her primary care team, and any specialty care, emergency department, hospital, and home community resources the veteran may need (VA, 2017b).

Diffusion of Excellence Initiative

The size and scope of the VA health system—over 1,700 sites of care and more than 300,000 employees—makes it inherently challenging to deliver care with consistent processes and outcomes across the system (Clancy, 2016). Recently, the external evaluation of VA care under the Veterans Choice Act recommended a systematic effort “to identify unwarranted variation, identify and develop best practices to improve performance, and embed these practices into routine use across the VA system” (MITRE Corporation, 2015, p. B3). In response, with the support of QUERI, the VA launched the Diffusion of Excellence initiative to spread and implement best practices in the VA nationally that address the

priority areas in access, employee engagement, care coordination, and quality and safety. The specific goals of the Diffusion of Excellence Initiative are to identify clinical and administrative best practices, to disseminate these practices to other sites of care, and to encourage the standardization of practices that deliver positive outcomes for veterans and their families. As of September 2016, this diffusion model had generated over 260 ongoing innovations in 70 facilities (Clancy, 2016). Examples of mental health projects selected for replication include an information technology solution called e-Screening which veterans use to complete mental health screening questions directly into the medical record (increasing needed mental health referrals or interventions by 34.6 percent per year, or 325 veterans, for veterans at high risk for suicide); and a home-based mental health evaluation program for rural veterans (designed to reduce psychiatric rehospitalizations by 50 percent) (Elnahal et al., 2017).

VA's QUERI and Diffusion of Excellence programs reflect a learning approach to health care system improvement. In learning health care systems, science and informatics, patient-clinician partnerships, incentives, and culture are aligned to promote and enable continuous and real-time improvement in both the effectiveness and the efficiency of care (IOM, 2013). Systems that continuously improve by capturing and broadly disseminating lessons learned from every health care experience and new research discovery are exemplary models for achieving high-quality, high-value health care (IOM, 2013; Smith et al., 2012).

SUMMARY

- The VA has a long history of taking important steps to improve the care and services it provides to veterans. The committee found that the VA currently has many key initiatives aimed at measuring system performance to improve mental health care access and quality. Examples of those efforts include the expansion of quality management data systems with more measures of mental health care, the use of performance data to encourage greater engagement by VA management in mental health programming and improvement, the conduct of research (through QUERI resources, for example) to identify best practices for improved access and quality, and the creation of the Diffusion of Excellence Initiative which seeks to facilitate the routine use of effective practices across the health system. The VA's programs to train health care clinicians on evidence-based mental health treatments (discussed in Chapter 8) and to promote the use of those treatments by clinicians (discussed in Chapter 11) are other ways the VA has increased its capacity to provide evidence-based care.
- The committee found that the VA has a number of health information systems supporting data collection and analysis that can guide quality management, but questions remain about how well these systems produce internal assessments that drive the system to be more patient centered and value driven, while improving access and quality.
- Examples of service problems described in the report suggest that the VA does not appear to be generating and using its own data to improve what is wrong in the mental health system. More attention is needed on identifying the sources of variation across VISNs and VAMCs and using performance data about the various access and quality domains to establish targeted quality improvement efforts.
- None of the data systems for quality management described in this chapter (MHIS, SAIL, MHMS) collects and uses patient outcome data, which is a significant barrier to quality improvement. The VA has reported it is in the process of developing a comprehensive system to monitor health outcomes with standardized patient-reported outcome measures. In addition, there is limited use of cost data in VA quality assessments, which is necessary in the pursuit of value-driven care.

- To the committee's knowledge, the VA does not conduct systematic data collection and analysis of the quality of care or timeliness of care veterans receive through VA-purchased care programs, including the Veterans Choice Program. This is a significant gap in the VA's quality management of mental health care for veterans.
- Recent evaluations of the VA's collection and reporting of staff productivity data, which is discussed in Chapter 12, have found that problems associated with insufficient metrics and data accuracy limit the usefulness of these data for identifying opportunities to improve productivity and efficiency.
- In support of transparency, accountability, improvement, and patient-centered care, the VA has increased the amount of publicly available information about the performance of the health system in access and mental health domains. However, relative to measures on other types of health care services the VA provides, only a small number of mental health measures are available to the public.

REFERENCES

- Burstin, H., S. Leatherman, and D. Goldmann. 2016. The evolution of healthcare quality measurement in the United States. *Journal of Internal Medicine* 279(2):154–159.
- Clancy, C. 2016. *Statement of Carolyn Clancy, M.D., deputy under secretary for organizational excellence, Veterans Health Administration, Department of Veterans Affairs, before the Senate Committee on Veterans' Affairs, September 7, 2016*. Washington, DC: Department of Veterans Affairs.
- CMS (Centers for Medicare & Medicaid Services). 2016. *Adult health care quality measures*. <https://www.medicare.gov/medicaid/quality-of-care/performance-measurement/adult-core-set/index.html> (accessed October 31, 2016).
- Cook, J. M., and S. Wiltsey-Stirman. 2015. Implementation of evidence-based treatment for PTSD. *PTSD Research Quarterly* 26(4):1–3.
- Donabedian, A. 1988. The quality of care. How can it be assessed? *JAMA* 260(12):1743–1748.
- Elnahal, S. M., C. M. Clancy, and D. J. Shulkin. 2017. A framework for disseminating clinical best practices in the VA health system. *JAMA* 317(3):255–256.
- Farmer, M. M., L. V. Rubenstein, C. D. Sherbourne, A. Huynh, K. Chu, C. A. Lam, J. J. Fickel, M. L. Lee, M. E. Metzger, L. Verchinina, E. P. Post, and E. F. Chaney. 2016. Depression quality of care: Measuring quality over time using VA electronic medical record data. *Journal of General Internal Medicine* 31(1):36–45.
- IOM (Institute of Medicine). 2006. *Improving the quality of health care for mental and substance-use conditions: Quality chasm series*. Washington, DC: The National Academies Press.
- IOM. 2013. *Best care at lower cost: The path to continuously learning health care in America*, edited by M. Smith, R. Saunders, L. Stuckhardt, and J. M. McGinnis. Washington, DC: The National Academies Press.
- IOM. 2015. *Health care scheduling and access: Getting to now*. Washington, DC: The National Academies Press.
- Kilbourne, A. M., D. Keyser, and H. A. Pincus. 2010. Challenges and opportunities in measuring the quality of mental health care. *Canadian Journal of Psychiatry* 55(9):549–557.
- Kizer, K. W. 2001. Establishing health care performance standards in an era of consumerism. *JAMA* 286(10):1213–1217.
- Kizer, K. W., and A. K. Jha. 2014. Restoring trust in VA health care. *New England Journal of Medicine* 371(4):295–297.
- Kizer, K. W., J. G. Demakis, and J. R. Feussner. 2000. Reinventing VA health care: Systematizing quality improvement and quality innovation. *Medical Care* 38(6 Suppl 1):I7–I16.
- Lemke, S., M. T. Boden, L. K. Kearney, D. D. Krahn, M. J. Neuman, E. M. Schmidt, and J. A. Trafton. 2017. Measurement-based management of mental health quality and access in VHA: SAIL mental health domain. *Psychological Services* 14(1):1–12.
- MITRE Corporation. 2015. *Independent assessment of the health care delivery systems and management processes of the Department of Veterans Affairs, Volume I: Integrated report*. McLean, VA: MITRE Corporation.
- NCQA (National Committee for Quality Assurance). 2015. *The state of health care quality 2015*. Washington, DC: National Committee for Quality Assurance.
- NQF (National Quality Forum). 2016. *Measure evaluation criteria and guidance for evaluating measures for endorsement*. Washington, DC: National Quality Forum.

- Pincus, H. A., B. Spaeth-Rublee, and K. E. Watkins. 2011. The case for measuring quality in mental health and substance abuse care. *Health Affairs* 30(4):730–736.
- Pincus, H. A., S. H. Scholle, B. Spaeth-Rublee, K. A. Hepner, and J. Brown. 2016. Quality measures for mental health and substance use: Gaps, opportunities, and challenges. *Health Affairs (Millwood)* 35(6):1000–1008.
- RAND Corporation. 2015. *Assessment C (Care authorities)*. Santa Monica, CA: RAND Corporation.
- Rosenbaum, S. 2011. Law and the public's health. *Public Health Reports* 126(1):130–135.
- SAMHSA (Substance Abuse and Mental Health Services Administration). 2016. *National behavioral health quality framework*. <https://www.samhsa.gov/data/national-behavioral-health-quality-framework> (accessed October 31, 2016).
- Schmidt, E. M., D. D. Krahn, M. H. McGuire, S. Tavakoli, D. M. Wright, H. E. Solares, S. Lemke, and J. Trafton. 2017. Using organizational and clinical performance data to increase the value of mental health care. *Psychological Services* 14(1):13–22.
- Smith, M., G. Halvorson, and G. Kaplan. 2012. What's needed is a health care system that learns: Recommendations from an IOM report. *JAMA* 308(16):1637–1638.
- Trafton, J. A., G. Greenberg, A. H. Harris, S. Tavakoli, L. Kearney, J. McCarthy, F. Blow, R. Hoff, and M. Schohn. 2013. VHA mental health information system: Applying health information technology to monitor and facilitate implementation of VHA Uniform Mental Health Services Handbook requirements. *Medical Care* 51(3 Suppl 1):S29–S36.
- VA (Department of Veterans Affairs). 2015. *Uniform mental health services in VA medical centers and clinics*. Washington, DC: Department of Veterans Affairs.
- VA. 2016a. *Department of Veterans Affairs, Volume II: Medical programs and information technology programs. Congressional submission FY 2017 funding and FY 2018 advance appropriations*. Washington, DC: Department of Veterans Affairs.
- VA. 2016b. *Quality of care: How does your medical center perform*. <https://www.va.gov/QUALITYOFCARE/apps/mcps-app.asp> (accessed March 6, 2017).
- VA. 2016c. *Strategic Analysis for Improving and Learning (SAIL)*. https://www.va.gov/QUALITYOFCARE/measure-up/Strategic_Analytics_for_Improvement_and_Learning_SAIL.asp (accessed March 6, 2017).
- VA. 2016d. *Mental Health Satisfaction Survey: Veteran Satisfaction Survey (VSS) national results*. Washington, DC: Department of Veterans Affairs.
- VA. 2016e. *National Mental Health Providers Survey: 2015*. Washington, DC: Department of Veterans Affairs, Office of Mental Health Operations.
- VA. 2017a. *COIN: Center for Mental Healthcare and Outcomes Research (CeMHOR), North Little Rock, AR*. <https://www.hsr.d.research.va.gov/centers/cemhor.cfm> (accessed January 18, 2017).
- VA. 2017b. *National network of QUERI programs*. <http://www.queri.research.va.gov/programs/default.cfm> (accessed March 6, 2017).
- VA. 2017c. *Response to committee request for information*. Department of Veterans Affairs.

16

Findings, Conclusions, and Recommendations

The previous chapters of this report present the committee's assessment of the accessibility, patient-centeredness, quality, and outcomes of the mental health care services provided by the Department of Veterans Affairs (VA) health care system, managed by the Veterans Health Administration (VHA), which is a sub-cabinet level agency within the VA, focusing especially on services for veterans of Operations Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND). The committee's approach to gathering information to address its task was threefold: reviewing the literature on health services and other relevant topics, conducting site visits to VA facilities around the nation, and developing and fielding a survey of OEF/OIF/OND veterans. This chapter presents the committee's key findings and its conclusions and recommendations.

KEY FINDINGS

The committee's findings about the demographics of the OEF/OIF/OND population, its need for mental health services, and the accessibility and quality of the VA's mental health services are presented in detail in Chapters 6 and 8–15. Key findings are summarized here.

A significant percentage of the OEF/OIF/OND veteran population is in need of mental health care. The committee's survey found that

- Of an estimated 4.2 million OEF/OIF/OND veterans, 41 percent of veterans have a potential need for mental health services. Veterans were considered to have a mental health need if they had a positive result on at least one of five mental health screeners or had reported being told by a health professional they have a mental health condition. This finding is consistent with the results from another national survey of OEF/OIF/OND veterans (Elbogen et al., 2013). The mental health screeners used in these surveys are not diagnostic instruments and therefore a positive screen does not necessarily mean that a veteran has a mental health condition; rather,

it indicates a need for further clinical assessment by a mental health professional to determine a diagnosis and whether there is a need for treatment.

- Over two-thirds (69 percent) of OEF/OIF/OND veterans who had a positive result on one or more mental health screeners in the survey reported having been told recently by a health professional that they have a least one mental health disorder.
- Nearly one-quarter (22 percent) of OEF/OIF/OND veterans perceive a need for care. This was measured by responses to a question about whether the veterans felt a need to see a professional because of mental health problems.
- Over half of veterans who have a mental health need do not perceive a need for mental health services, which suggests that some veterans do not seek care because they do not perceive that they personally have a need.
- Combat exposure and cumulative deployment time are among the strongest predictors associated with having a mental health need.

There is a substantial unmet need for mental health services in the OEF/OIF/OND population.

- Of those who have an assessed mental health need (as determined by a positive mental health screen or reported diagnosis), less than half (44 percent) of OEF/OIF/OND veterans have sought either VA or non-VA mental health care services. While all of the remaining estimated 900,000 veterans cannot definitively be categorized as having unmet needs, the survey results suggest that a substantial number do have unmet needs.
- Among the 22 percent of veterans reporting a perceived mental health need, 48 percent have sought either VA or non-VA mental health care services. Among those veterans with a perceived need who also had an assessed need, 55 percent sought such care.
- Therefore, depending on which measure of potential need is used (assessed need or assessed need in combination with perceived need), the proportions using VA or non-VA mental health care services varies from 44 to 55 percent, a range that suggests that a large number of veterans are not getting care and that the potential unmet may be substantial.
- These results are consistent with several studies of VHA demonstrating that a large proportion of veterans do not receive any treatment following diagnosis of posttraumatic stress disorder (PTSD), alcohol or other substance use disorders (SUDs), or depression.
- Veterans who have a mental health need but do not have a disability rating are substantially less likely to be receiving mental health services than veterans who do have a disability rating.

A number of VA health system factors may facilitate or be barriers to veterans' willingness to seek care.

- A lack of awareness about how to connect to the VA for mental health care is pervasive among OEF/OIF/OND veterans.
 - The committee's survey found that among OEF/OIF/OND veterans who have a mental health need and who use mental health services about two-thirds use the VA. Among those who have a mental health need who have not sought VA mental health services, their main reasons are they do not know how to apply for VA mental health care benefits, they are unsure whether they are eligible, or they are unaware that the VA offers mental health care benefits.
 - The same reasons were frequently reported by veterans interviewed on the site visits. Veterans said that they were especially confounded by VHA and Veterans Benefits Administration (VBA) eligibility and the range of mental health care and other services offered by the VA.

- The process of accessing VA mental health services has been burdensome and unsatisfying for many OEF/OIF/OND veterans. Reports of barriers to access from the committee’s survey and site visits include
 - The majority (54 percent) of OEF/OIF/OND veterans surveyed who use the VA and have a mental health need reported that the process of getting mental health care was burdensome.
 - Appointment scheduling continues to be a problem for a large percentage of veterans: Among VA users who have a mental health need, only about half (49 percent) reported that it was easy to get an appointment, and about a third (34 percent) reported that they were dissatisfied with the time between their requests and the appointments. Nearly 40 percent of OEF/OIF/OND veterans who do not plan to use VA mental health care services in the future indicated that it was because the wait time for appointments at the VA is too long.
 - One in five OEF/OIF/OND veterans who are not at all likely to use VA mental health services in the future agreed with the statement “VA doctors/staff did not provide good quality treatment.”
 - Changes that OEF/OIF/OND veterans would like to see at the VA include making the process for scheduling appointment easier, better quality services and customer service, and more available services or facilities.
 - Site visit interviews illustrated many examples of the difficulties that veterans encounter when enrolling or interacting with the VA system; among the frequently reported themes were problems getting appointments, difficulties with interpersonal interactions with the administrative staff, and overall customer service.
- From a systems perspective, the VA can facilitate access by ensuring VA leadership and management acumen are focused on aligning resources to veteran needs. Chronic workforce problems exist that have a significant impact on the care veterans receive. Complex eligibility criteria and confusing procedures to transition between the Department of Defense (DoD) and the VA are examples of policy-related barriers veterans encounter when seeking VA health care.

Many veterans’ personal factors may facilitate or be barriers to veterans’ willingness to seek care.

- OEF/OIF/OND veterans who have a mental health need and who have significant others who support their seeking treatment are much more likely to use VA health care services than veterans without such support.
- Transportation and convenience may pose challenges for many OEF/OIF/OND veterans. A lower percentage of non-VA users who have mental health need live within 30 miles of a VA facility compared with VA users who have mental health need (45 percent versus 73 percent). A lower percentage of non-VA users who have mental health need live within a 45 minute drive from a VA facility compared with VA users who have mental health need (44 percent versus 76 percent). A lower percentage of non-VA users who have mental health need reported that it is very easy, somewhat easy, or neither easy nor hard to get to the nearest VA facility that offers mental health services compared with VA users who have mental health need (49 versus 75 percent).
- Other transportation challenges described by the veterans who were interviewed include having to rely on public transportation or rides from organizations such as the Disabled American Veterans and travel limitations associated with having a mental health condition or chronic pain.

- Regarding the mode of receiving care, 45 percent of OEF/OIF/OND veterans surveyed responded that they would likely use the Internet and 44 percent would likely use the phone to receive mental health care. Younger veterans tended to be more open to obtaining mental health care using the Internet.
- Approximately one-third of OEF/OIF/OND veterans who have a mental health need said that they have concerns about the following employment issues: spending time off from work, harm to their careers, denial of security clearance, and receiving less confidence and respect from co-workers and supervisors.
- OEF/OIF/OND veterans who have a mental health need also reported fears that discrimination could affect their ability to own guns, lead to a loss of contact with or custody of their children, or lead to a loss of medical or disability benefits.

A majority of OEF/OIF/OND veterans who use the VA report positive aspects of and experiences with VA mental health services.

- The committee's survey found that approximately two-thirds or more of OEF/OIF/OND veterans who have a mental health need and use VA services endorsed the following reasons to use the VA: prescription benefits, entitlement to services, a lower cost of services, the convenience of the VA location, liking the VA doctors or already using the VA for years, and the VA was the only available source of mental health care.
- A majority of VA users who have mental health need are positive about the VA's delivery of services, including the availability of needed services, the privacy and confidentiality of medical records, the ease of using VA mental health care, the mental health care staff's skill and expertise, and the staff's courtesy and respect toward patients.
- Those interviewees on the site visits who were satisfied with their care often pointed to ways their values and preferences had been accommodated by their individual providers. These veterans reported that they felt that their provider respected their preferences for treatment, honored their experiences as former members of the military, understood what they (the veterans) felt was important, and cared about them.

Many OEF/OIF/OND veterans receive high-quality mental health care from the VA; however, the VA's ability to deliver high-quality mental health care consistently to all veterans across facilities and subpopulations is an ongoing challenge.

- The VA uses state-of-the-art and scientifically validated practices to address and treat mental health conditions that are common in veterans. It has a robust process for disseminating evidence-based practices (EBPs) throughout the VA's health care system and for training its providers to use them.
- While studies comparing the quality of mental health care received by veteran versus civilian populations are scarce, there are data showing that the VA performs favorably on key measures of mental health care quality when compared to private health plans.
- Problems with manpower and physical infrastructure affect both access to care and the quality of the patient experience. The VA is experiencing significant shortages of mental health care providers despite efforts such as training programs for health professionals and using a wider variety of types of mental health professionals and paraprofessionals. Burnout and job-related stress among VA mental health providers may contribute to high turnover. The physical infrastructure

issues include a lack of office and exam room space, insufficient parking at VA medical centers (VAMCs), and aging buildings, but changes are hampered by fiscal and regulatory processes.

- While the evidence-based mental health services are available to veterans and are mostly concordant with clinical standards and policy mandates, the committee’s research and the literature demonstrate that there are significant gaps in the delivery of that care:
 - Many veterans are not getting care as set forth in clinical standards for dosage, frequency, and follow-up. For example, prolonged exposure therapy and cognitive processing therapy require specified treatment intervals. Based on site visits and the research literature, system issues, such as lag times between appointments that interfere with treatment fidelity, and patient factors, such as patient preferences for the treatment type and engagement and retention in treatment, influence the delivery of EBPs.
 - The VA has made patient-centered care a priority with programs such as *Whole Health*, patient-aligned care teams, and integrated health care. Some of the veterans and staff who were interviewed reported negative experiences and did not seem to view the VA as patient centered, but their negative comments largely reflected workforce issues (short staffing, employee turnover, and professional burnout), difficult interpersonal interactions with support staff, and issues related to a lack of providers with experience in military culture.
- Compared to veterans from other eras, the OEF/OIF/OND veteran population is younger, has a larger number of women, and is more racially and ethnically diverse. Demographic characteristics are changing, and so is the spectrum of mental needs. Select population groups, including women, racial and ethnic minorities, and homeless veterans, face unique barriers to access to mental health care compared with male, white, and housed veterans. These groups also have differences in diagnosis patterns and disparities in treatment.

The VA dedicates resources to and has a history of implementing innovative practices in the areas of patient care, health information technology, and quality monitoring.

- The VA has implemented innovative and evidence-based models of collaborative and integrated care to improve the delivery of mental health treatment including primary care–mental health integration, the Behavioral Health Interdisciplinary Program, and a continuum of care based on a stepped-care model approach.
- The VA has long-standing experience and expertise with electronic health records (EHRs), telehealth, virtual care technologies, and tele-mental health research and app development.
- The VA has many data systems tracking patient care; however, it has not yet systematically collected and reported standardized patient-reported outcome measures. The VA has a stated goal of completing by 2018 development and release of a comprehensive tracking system that will allow providers to track the flow of their patients through mental health care and monitor their outcomes with standardized patient-reported outcome measures. The committee is not aware of how the VA will maximize the use of clinical outcome data that are collected to enable aggregate program-level outcome evaluation.
- The VA is using some community-based mental health resources to serve veterans—for example, through the Veterans Choice Program and partnerships with organizations specializing in veterans’ services—to help alleviate the VA’s workforce and infrastructure problems. However, the VA does not collect adequate information about the approaches it uses to ensure care coordination of and quality monitoring for services the VA offers through contracts with community providers.

CONCLUSIONS AND RECOMMENDATIONS

As the nation's largest provider of mental health care services, the VA health care system has tremendous mental health care expertise, many and diverse care delivery assets, and substantial training and research capabilities. It has a unique and unparalleled opportunity to address the mental health care needs of veterans in a truly integrated and strategic manner. Furthermore, the VA is positioned to inform and influence how mental health care services are provided more broadly in the United States.

After reviewing extensive evidence, which was presented in earlier chapters of this report, the committee concludes that the VA provides mental health care that is generally of comparable or superior quality to mental health care that is provided in the private and non-VA public sectors and that it has multiple centers of excellence in various aspects of mental health care. However, the accessibility and quality of mental health care services across the system varies by facility. For example, the committee found variability in staffing levels, types of providers, infrastructure resources, and veterans' access, and in the types and consistency of treatments provided. It should be noted that problems with accessibility and quality of mental health care are not unique to the VA; similar problems also have been reported in the private and non-VA public sectors. Although many OEF/OIF/OND veterans are satisfied with the VA's mental health care, the committee believes that there are multiple opportunities for improving VA mental health care, especially with regard to increasing or facilitating access to care, providing care that centered on the patient's needs and expectations (that is, patient-centered care), and ensuring the consistency and predictability of readily accessible high-quality care being provided across the entire system. To become a high-reliability provider of mental health care services (described in Chapter 7), the VA needs to align its resources with the need for services and consistently and predictably provide readily accessible, high-quality mental health care at every facility for every veteran on every occasion.

Recommendation 16-1. The VA should set a goal of becoming a high-reliability provider of high-quality mental health care services throughout the VA health care system within 3 to 5 years. The VA should develop a comprehensive system-wide strategic plan for providing readily accessible, high-quality, integrated mental health care services to improve the overall health and well-being of veterans. This plan should have a 3- to 5-year horizon and its implementation should be regularly monitored, reviewed, and updated, as needed, during that time.

The VHA needs to undertake a concerted, system-wide effort to organize and align its care delivery assets and processes of care toward this end, while concomitantly working with the VBA and other elements of the VA to achieve this goal. In some cases, this effort will mean marshalling additional or revamped care delivery and infrastructure assets, especially with regard to workforce and facility needs. To support these efforts, the VA should develop a comprehensive strategic plan or roadmap for reaching this objective. The strategic plan should address at least the following areas:

- a. Ways to enhance and facilitate timely access to patient-centered care and remove barriers to access. Broad input from patients using mental health care, as well as from staff, about service satisfaction and the barriers to providing patient-centered care should be solicited. Evaluate service-improvement programs such as MyVA as well as the many mental health service programs that the VA offers to learn whether these programs are achieving stated goals. Facilities should be identified that have high service satisfaction, service effectiveness, increased access, and efficiency with the objective of calling out practices that might be adopted by other facilities.
- b. Workforce issues, including the recruitment, hiring, and retention of diverse staff; ensuring that VA health professionals are working at the top of their skills and expertise; and using health professional training programs to address staffing needs.

- c. The integration of the services of non-VA mental health care providers (for example, providers participating in VA community care programs such as the Veterans Choice Program) into the VA health care system. Independent evaluation of the utilization and quality of mental health services specifically provided by community-care programs.
- d. Facility and other infrastructure needs, including facility physical plant issues that present barriers to access (for example, a lack of parking) or to the efficient and effective delivery of patient-centered care (for example, insufficient space for clinical evaluations and treatment).
- e. The integration of mental health care with both primary and non-mental health specialty care.
- f. The use of virtual care technologies, including telehealth and Internet-based technologies, to enhance access to and the delivery of mental health care.
- g. Performance management to advance the quality of mental health care.
- h. Incorporation of continuous quality improvement into all aspects of mental health care delivery.
- i. The deployment and use of EBPs.
 - i. Address barriers to providers' use of recommended guidelines.
 - ii. Review existing priority areas in clinical guidance and policy directives to confirm the evidentiary base underlying the practices recommended for these priorities and to identify clinical practices requiring reassessment, inclusion, or removal.
 - iii. Increase use of EBPs through efficient and scalable clinical training procedures.
- j. The system-wide review, modification, and standardization of policies and processes of care that facilitate and support access and the provision of high-quality mental health care.
- k. Ways to foster and nurture innovation in methods and processes of mental health care.
- l. Identifying and addressing research gaps and priorities.

The development of this strategic plan should be informed by the numerous studies and evaluations that have been conducted of VA health care in recent years. The VA should examine those reports to determine the reasons why some recommendations contained in them were judged to be appropriate but were not implemented. As appropriate, those recommendations, along with the recommendations contained in this report, should be collated and incorporated into or otherwise addressed in the mental health care strategic plan (Recommendation 16-1). The committee understands that an analogous process was used to create the Mental Health Strategic Plan of 2004 (VHA Mental Health Strategic Plan Workgroup/Mental Health Strategic Health Care Group, 2004), which appeared to be effective in addressing a number of long-standing, chronic problems with provision of VA mental health care.

Below the committee makes additional recommendations that expand on some of the strategic plan areas listed above in Recommendation 16-1.

Access to Mental Health Care

In earlier chapters of this report and as summarized above in the section on key findings, the committee identified a number of ways OEF/OIF/OND veterans were having problems accessing mental health care from the VA. On the basis of those findings, the committee believes that the VA needs to do more to bring veterans who have unmet mental health care needs into the VA health care system. The lack of awareness about how to connect to the VA for mental health care demonstrates the need for awareness campaigns and effective dissemination of the mental health care opportunities, eligibility criteria, and services to help veterans understand how and where to access mental health care. The VA's recent initiative to offer emergency mental health care to veterans with other-than-honorable discharge status is an important step in improving access for veterans who may be in need of immediate help. It may be particularly challenging to support veterans who are not ready to seek mental health services but who may want to obtain services

at a later time. The VA should consider strategies for following up with veterans at regular intervals (for example, every 3 to 6 months for 2 to 3 years) following discharge from the military.

Recommendation 16-2. Via policy changes and other approaches, the VA should eliminate barriers to accessing mental health care experienced by OEF/OIF/OND veterans. The VA should adopt additional strategies to engage veterans, expand outreach efforts beyond the initial post-deployment period, and improve its transitional services as well as VBA and VHA processes with the goal of enhancing and facilitating access to mental health care.

Specific actions to be undertaken include

- a. The VA, along with DoD, should re-examine the processes for transitioning services from DoD to VA with the objective of enhancing the coordination and integration of services (including the determination of benefits and disability ratings and the transfer of health care records) and with the continuation of health care services. Possible improvements could include setting up initial VA health appointments as part of the Transition Assistance Program and providing liaisons who can be contacted to assist throughout the transition process and for a period of time afterwards.
- b. The VA should examine the VHA and VBA interfaces with the goal of creating standard protocols (for example, for VBA compensation exams) to facilitate veteran access to services for physical and mental health conditions. The VA should view VBA compensation and pension examinations as an opportunity to engage veterans in ongoing care.
- c. The VA should use assertive outreach to bring veterans who have mental health care needs into the system. The U.S. Department of Housing and Urban Development—VA Supportive Housing program to address veteran homelessness is an example of how assertive outreach already has been effective for the VA.
- d. The VA should assess the availability and effectiveness of its peer specialist program and other support programs (for example, patient care navigators) at its facilities and develop appropriate implementation strategies if the assessment determines that these resources should be augmented.

Site visits also revealed that case managers and formal and informal system navigators are effective at helping veterans navigate both the VA bureaucracy and VA facilities. The various veteran service organizations have often played a critically important role in this regard, especially with regard to assisting veterans with VBA disability evaluations. However, navigational resources are limited and not available in all VAMCs.

As discussed in Chapter 2, mental health care services in the private sector are not adequate to meet the current demand for such services in many communities across the United States. There are, however, communities where resources are sufficient to do more and where these resources could be used to meet veterans' needs. Several of these resources are described in Chapter 9. These resources generally provide ancillary and complementary services to support mental health treatment obtained from VA providers and from community care providers such as Veterans Choice Program providers.

Recommendation 16-3. The VA should examine how its facilities interface with community resources and compile an inventory of VA–community collaborations with the objective of identifying exemplary or model collaborations and best practices for forging community partnerships.

Equitable Care

Demographic data show that the OEF/OIF/OND veteran population is more racially and ethnically diverse and has more women than other veteran cohorts. As detailed in Chapter 13, the literature reveals differences in mental health diagnosis and treatment patterns across races and ethnicities among veterans receiving care at the VA. The reasons are not clear, but some researchers posit that the difference in diagnosis patterns may be related to provider characteristics, doctor–patient communication, patient participation, or the lack of cultural sensitivity in diagnostic criteria for mental health conditions. The rates of using mental health care services also differ across different demographic groups.

A published study reported that women veterans who served in OEF/OIF have a higher need for mental health care compared to women veterans from previous conflicts. The committee’s survey found that women veterans are significantly more likely to believe that they are not entitled or eligible for VA mental health services compared with men veterans who served in OEF/OIF/OND. The committee heard from women veterans during the site visits that staff at VA health facilities sometimes assumes that they are wives accompanying their husbands and not themselves veterans. They also are at times uncomfortable in VA clinic waiting rooms because they get unwanted sexual attention which can be particularly unsettling for women veterans who have experienced military sexual trauma. Although the research is still emerging, it seems that lesbian, gay, and bisexual veterans may use mental health services at a lower rate than veterans who are not lesbian, gay, or bisexual (see Chapter 13). Transgendered veterans may be more likely to have a mental health diagnosis than non-transgendered veterans. Research on homeless veterans shows that they are more likely to defer or delay mental health care than housed veterans even though they have a greater need for services. While interventions to reduce mental health stigma are emerging, stigma remains a barrier to seeking mental health care among veterans (as is the case broadly in the United States). Symptom severity may predict higher perceived stigma.

Recommendation 16-4. The VA should take steps to ensure that its diverse patient population receives readily accessible, high-quality, integrated mental health care services. Areas to focus on are service delivery, workforce issues, and resource allocation (including the logistics of care delivery and the structure of clinical space).

Specific actions should include

- a. Ensuring that clinical environments are supportive of quality care for racial and ethnic minorities by ensuring that the racial and ethnic diversity among clinical and administrative staff reflects the diversity of the patient population, identifying and addressing discrimination, and monitoring and addressing health care disparities.
- b. Ensuring that clinical environments are supportive of quality care for women veterans, efforts that should include the provision of gender-appropriate providers and intolerance of harassment of women veterans by either staff or fellow patients.
- c. Assessing the needs of lesbian, gay, bisexual, and transgender veterans and providing an appropriately welcoming and supportive environment.
- d. Assessing the needs and barriers to care for rural-dwelling veterans and ensuring that the demand for care in rural locations is met.
- e. Identifying the homeless veterans who are being served and adjusting clinical services to provide them quality care and facilitate domiciliary services when appropriate.
- f. Ensuring that both VA and community care providers understand military culture.

Human Resources and Capital Assets

As detailed in Chapter 8, the committee found that some VA facilities are understaffed and have inadequate clinical and office space to support the efficient delivery of care or patient-centered care. As a result of these infrastructure problems, VA mental health providers sometimes cannot meet the demand for mental health care services and providers “burn out,” which can interfere with the quality of the relationship between the veteran and provider. Primary care–mental health integration is one strategy that the VA has employed to realign its human resources to reduce service fragmentation and improve patient care. While the VA needs to ensure that its existing mental health care resources are allocated in a manner that optimizes the likelihood that they are effectively and efficiently used, it was clear to the committee that additional staff and clinical space are needed at some facilities. The committee recognizes that increasing the VA’s mental health workforce is particularly challenging, given the nationwide shortage of mental health care providers, and consequently it believes that the VA should explore ways it can use its educational and training infrastructure to address its workforce needs. Space shortages appear to be more of a concern at VAMCs and VA community-based outpatient centers (CBOCs) than at Vet Centers.

The lack of adequate space and workforce appears to be a prominent reason that staff at some VA facilities sometimes cannot provide EBPs. The use of therapy groups, which is a legitimate and often clinically indicated treatment approach, appears in some cases to have been used as a method of managing the overwhelming service demand.

Veterans sometimes experience a lack of continuity in their mental health care because of the turnover of providers and, especially, providers in training. (Many VA facilities are affiliated with academic medical centers, and, as is customary in academic training programs, trainees gain experience by treating veterans but must discontinue the therapeutic relationship when they rotate to a different clinical service or complete training.) The committee believes that the training of mental health care providers at VA facilities is highly desirable, but it also believes that the VA should make an effort to better bridge the transition from one trainee therapist to another. Some possible ways to accomplish this include limiting the number of times that the same veteran transitions to new trainees, better preparing veterans for the transition of caregivers by better coordination to minimize gaps in care, more strategic case assignment (for example, since EBPs are time limited, they may therefore be well suited for trainees), and improving efforts to assess whether a treatment can be completed or transitioned to a different level of care within the time frame of a trainee’s experience. The VA should raise provider awareness of the issue of continuity of care from the veteran’s perspective.

The VA has a variety of incentive programs to help bolster recruiting and retention. As described in Chapter 8, Title 38 U.S.C. positions, for example, can be filled by appointing a former or current VA trainee without formally posting the position and going through the full recruitment process. At present, the only types of mental health care providers included under Title 38 are physicians, psychologists, nurses, and physician assistants. Reclassifying all types of mental health care workers, including substance use counselors, under Title 38 might help in addressing some of the mental health care workforce problems.

As noted in Chapter 8, the committee heard repeatedly during its site visits that the VA’s human resources management process is cumbersome and onerous. There was broad support for improving the human resource management process, specifically with regard to the recruitment, onboarding, and retention of both care provider and support staff. Prominent among some of the suggestions for improving human resources related to mental health services were initiating the recruitment of staff as soon as a potential vacancy is identified or otherwise as early as possible in order to minimize the length of vacancies and also streamlining the hiring and onboarding processes. The recruitment of staff may benefit from improving working conditions, including having adequate clinical and office space to support efficient and effective patient-centered care; offering incentive awards; better supporting clinicians so that they

can focus more on clinical work and spend less time on administrative and clerical tasks; and creating work environments and processes that allow the staff to work to the fullest extent allowed by their licenses. In some cases, staff members will also need to be better trained in issues that are specific to caring for veterans, including OEF/OIF/OND veterans. Among other things, this training would include issues such as military culture and military sexual trauma.

During the site visits, many veterans reported that they highly valued the care that they received at Vet Centers and that they preferred to go to Vet Centers for their mental health care instead of VAMCs or CBOCs. Some of the reasons that veterans offered for preferring using the Vet Centers were the availability of marital and family therapies, a less formal atmosphere, seemingly enhanced confidentiality, shorter wait times, more flexible hours of operation, and the Vet Center's emphasis on counseling services rather than the use of medications. Peer support is typically readily available as well. The VA should explore how the Vet Center program could be enhanced or, alternatively, how the characteristics of the Vet Centers that appeal to veterans could be replicated at CBOCs and VAMCs.

Recommendation 16-5. The VA should evaluate whether all types of mental health care workers could be brought under Title 38 U.S.C. and if this might alleviate some workforce shortages. If the assessment indicates that this reclassification would have a salutary effect, then the VA should pursue the necessary solutions.

Recommendation 16-6. The VA should conduct a broad examination of its various types of facilities to assess how it could realign its human resources and capital assets to better meet the demand for mental health care services. Adequate clinical and office space and staffing are necessary to reduce wait times, lessen administrative and clerical burden on clinicians, improve the fidelity of treatment, and increase adherence to clinical practice guidelines.

Health Technology

In its review of the literature and its analyses of its survey and site visit information, as detailed in Chapters 6 and 14, the committee found that the VA is using health technology, including telemedicine (the use of electronic information and communication technologies to provide health care) and mHealth (mobile health apps), to increase access to mental health care and to treat and help manage a variety of mental health conditions, including PTSD, depression, and SUDs. While telemedicine infrastructure has been widely rolled out, its actual use across the VA is highly variable and seems to be dependent on local champions and use cases, rather than on directed strategic approaches. The VA has been steadily increasing funding for telemedicine and has expanded telemedicine services throughout its health system. Nearly all of the published literature supports the use of telemedicine as a way of effectively delivering various health care services and, especially, mental health care. However, the literature regarding the use of telemedicine to deliver evidence-based treatments, specifically prolonged exposure and cognitive processing therapies, is sparse. Literature regarding the effectiveness of mHealth technologies also is sparse, but emerging. Furthermore, the use of virtual care technologies for mental health care is not yet fully integrated as a part of standard clinical care at the VA. Several barriers to access to care, such as the long distances to VA clinics and VA workforce shortages, could be addressed by using tele-mental health for clinical services.

While the growth of tele-mental health indicates the VA's commitment to using technology to improve access to mental health care, research gaps in the field remain, as do implementation and attitudinal barriers in the VA. Long-term outcome studies are needed on the use of tele-mental health for conditions other than PTSD or depression. Further research also is needed on the use of tele-mental health

for evidence-based therapies—for example, therapies delivered in the home or in mobile settings—and for technologies other than videoconferencing, such as mHealth smartphone applications. In another use of health technology, research is needed to better understand how to optimize VA health information systems for comprehensive surveillance of suicide attempts among VA health care service users. To further maximize the benefits of health technology, the VA needs greater buy-in and commitment from national and local VA leaders, providers, and veterans in order to enable telehealth modalities to be a standard part of routine care, when appropriate. Coordinated training efforts at the provider and leadership level could improve buy-in and successful adoption.

Recommendation 16-7. The VA should leverage its existing health technology infrastructure and internationally recognized expertise in telehealth and virtual care to substantially expand the scale and quality of its tele-mental health and technology-supported mental health services for clinical, research, and educational purposes.

The VA is already a widely recognized leader in the research and development of, as well as the implementation and use of, electronic health records, telemedicine, and clinical information technologies such as mHealth to be used at the provider–veteran interface, but the potential value of this infrastructure and personnel capacity and strength is not currently being fully realized. The VA needs to move from this position of strength and set quantitative targets for the use of virtual care technologies (for example, to have 30 percent of all mental health consultations being performed online within 3 years), similar to what was done with regard to increasing ambulatory surgery in the VA in the late 1990s. It should do this by

- a. Collaborating with partners, such as DoD and academic medical centers, to increase and support strategic research into the best use of these information technologies to support the mission of the VA and the care of veterans nationally, with a focus on methods used in dissemination and implementation research.
- b. Substantially increasing and scaling the use of clinical information technologies for direct mental health care (for example, video, telephony, e-consults, messaging, apps, virtual reality, and gamification), and integrating them as a routine choice as part of stepped care for veterans across the full range of VA mental health and primary care programs.
- c. Training leadership at all levels throughout the VA on how to promote and incentivize the increasing use of health information technologies in every VA area and on how to capture and copy examples of excellent implementation and innovation found in other VA regions.
- d. Increasingly employing qualified providers as a virtual network of experts to work across the country, rather than primarily in a single region, and substantially increasing the use of such providers for meeting both training and service needs and capacities created by workforce shortages in some VA regions.
- e. Making work conditions more flexible for many clinicians to enable them to increasingly work in a hybrid manner—both in-person and online—and to work both within their own work regions and within other VA regions so that mental health care becomes available in a virtual manner, anytime, anywhere, especially direct to veterans in their homes. For workload and cost accounting purposes, providers will need to receive “credit” for work provided outside their own regions or networks.
- f. Ensuring that the current VA EHR system is interoperable with DoD’s EHR and other commercially available EHRs to allow the passage of patient information (both physical health and mental health information) seamlessly and rapidly, thereby making sure that complete information is available to providers when and where it is needed.

Quality Management

The VA has a long history of taking important steps to improve the care and services it provides to veterans. The VA has many key initiatives aimed at measuring system performance to improve mental health care access and quality. Recent efforts include the expansion of quality management data systems (such as Strategic Analytics for Improvement and Learning and the Mental Health Management System) with more measures of mental health care, the use of performance data to encourage greater engagement by VA management in mental health programming and improvement, the conduct of research (through Quality Enhancement Research Initiative resources, for example) to identify best practices for improved access and quality, and the creation of the Diffusion of Excellence Initiative which seeks to facilitate the routine use of effective practices across the health system. In addition, the VA's programs to train clinicians on evidence-based mental health treatments and to promote the use of those treatments by clinicians are other ways the VA has increased its capacity to provide evidence-based care.

The VA uses a number of quality management strategies, programs, and systems, but questions remain about how well these efforts are driving the system to be more patient centered and value driven while also improving access to care and quality of care. Problems with provision of services suggest that the VA does not appear to be adequately generating and using data to improve its mental health care system. More attention is needed to identify the sources of variation across VISNs and VAMCs and on using performance data about the various access and quality domains to establish targeted quality improvement efforts.

Given the large numbers of veterans who do not seek mental health care (see Chapter 6) and the significant percentages of veterans who are not receiving mental health treatments that meet recommended dosages, frequency, or follow-up (see Chapter 11), particular attention should be placed on measuring and monitoring the delivery of evidence-based care, patient engagement in care, and continuity of care. These areas of performance measurement should address veterans who receive care within the VA health system and veterans who receive care through VA community care programs, such as the Veterans Choice Program.

As discussed in Chapter 15, the VA needs better and a broader array of quality measures to improve the interface between general medicine and mental health. Few indicators have been implemented at the VA or nationally that specifically assess the quality of mental and general health care integration. For example, there is a need for standardized measures assessing the ability of patients in primary care settings to access effective mental health care as well as to assess the ability of individuals treated in mental health care settings to access needed preventive services and primary care. The quality reported by subgroups (for example, the type of mental health condition and the specific demographics) can support targeted interventions.

None of the VA's data systems for quality management described in Chapter 15 collect and use patient outcome data, which is a significant barrier to quality improvement. Understanding, demonstrating, and continually increasing the quality of VA mental health care depends on standardized outcome measures. Patient outcome data are the necessary standard against which to judge effectiveness of the VA facilities' quality improvement efforts. Another priority area is methods for measuring and improving the delivery of psychosocial interventions. The preponderance of mental health measures focus on medication management for the treatment of mental health conditions. However, cognitive behavioral therapy is the first-line EBP for depressive and anxiety disorders (see Chapter 4). The committee found that the VA has started collecting data on the delivery of evidence-based psychotherapy using electronic clinical progress templates incorporated into veterans' health records. Quality measures in this area can have an important role to play in supporting patient-centered treatment.

Finally, to become a high-reliability mental health care system, the VA has to develop a more robust quality management infrastructure that will support the continuous evaluation of access, quality of care, and outcomes, among other things. This requires a much more broadly based portfolio of performance

measures than exists today. And while the development and use of mental health performance measures has gained momentum in recent years, and while the VA has been an active participant in this arena, the committee believes the VA should take a lead role nationally in measuring the quality of mental health care. The VA health care system can serve as a testing ground for measurement innovation that can benefit both veterans and the U.S. population broadly. And since a growing number of veterans are receiving care in the non-VA public and private health care sectors, the VA has a vested interest in establishing standardized performance measures that can be used to assess and improve the quality of care.

Recommendation 16-8. The VA should take a lead role nationally in advancing quality management in mental health care. Toward this end, the VA should take steps to accelerate the development and use of standardized performance measures to assess and improve care for mental health conditions in veterans. It should engage with performance measure development organizations to develop a robust portfolio of mental health care performance measures. As part of its comprehensive mental health care strategic plan, the VA should articulate how performance measures will be rolled out and implemented, maintained, and used for quality improvement and research purposes, and otherwise managed.

The committee found that quality performance data are routinely reported internally and publicly to support and incentivize ongoing quality improvement and to facilitate transparency. The VA also is demonstrating efforts to use and improve upon resources, such as the new Diffusion of Excellence Initiative, for disseminating best practices. Yet the persistent variation in the quality of care and the low rates of delivering ongoing treatment throughout the VA health care system indicate a need for the VA to continue efforts to improve clinical quality processes and to continue to transform itself into a learning organization marked by a culture of continuous improvement.

REFERENCES

- Elbogen, E. B., H. R. Wagner, S. C. Johnson, P. Kinneer, H. Kang, J. J. Vasterling, C. Timko, and J. C. Beckham. 2013. Are Iraq and Afghanistan veterans using mental health services? New data from a national random-sample survey. *Psychiatric Services* 64(2):134–141.
- VHA (Veterans Health Administration) Mental Health Strategic Plan Workgroup/Mental Health Strategic Health Care Group. 2004. *A comprehensive VHA strategic plan for mental health services-revised*. Washington, DC: Department of Veterans Affairs.

Appendix A

Supporting Documentation for the Survey*

SAMPLING AND WEIGHTING PLANS

Sampling

This document, dated May 25, 2016, updates the sampling-and-weighting-plans document dated April 1, 2015, based on committee comments, an analysis of data files received from the Department of Veterans Affairs (VA), and the selection of a sample of veterans from the data files received from the VA. Italics font indicates new material. Tables A-1 and A-2 are also new material.

A two-phase sample design will be employed for the survey of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) veterans. In the first phase of sampling, the VA selected a random sample of 25 percent of all OEF/OIF/OND veterans. The Institute of Medicine (IOM)¹ had requested that the VA provide an identifier, plus 27 additional auxiliary variables for each sampled veteran. Westat will use a subset of the auxiliary variables to stratify the first-phase sample and then select a stratified second-phase sample. The identifiers for the second-phase sample will be provided to the VA, who will then provide back to Westat the identities and contact information for these veterans. Westat will use the contact information to conduct data collection.

The VA has provided Westat two data files. One file, containing 470,606 records, provides data for a 25 percent sample of OEF/OIF/OND veterans who have had in-theater service and according to VA records were alive on October 1, 2015. The data source for this file was the OEF/OIF/OND roster file. The second file, containing 724,738 records, provides data for a 25 percent sample of OEF/OIF/OND veterans who were not deployed to Iraq or Afghanistan. The VA created this second file from multiple

*The following documents were prepared by Westat, an independent research corporation, which assisted the committee with the design, implementation, and analysis of the survey.

¹At the time the survey work began, the Institute of Medicine was a program unit in the National Academies. After an organizational restructuring in March 2016, the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine carries out the work previously undertaken by the Institute of Medicine.

TABLE A-1a Variables on VA-Provided Data Relevant to the Selection of the Second-Phase Sample

Type of Variable	Description	Percent Missing	
		Deployed	Not Deployed
Demographic	Date of Birth	0.04%	81%
	Sex	0.02%	81%
Military	Deployment status	0%	0%
	Component (active or reserve)	0%	100%
	Rank	0%	100%

administrative data sources, with a veteran's demographic variables being included only if the veteran appeared in VA medical records. Table A-1a describes the demographic and military variables on these two files relevant to the selection of the second-phase sample.

The VA had been asked to provide particular demographic and military variables for use as stratification variables. One of the requested military variables was Branch of Service, but this variable was missing on both data files. The requested demographic variables and the other requested military variables were present on the data file of deployed veterans. However, these variables were not present on the data file of veterans who had not been deployed. Because sex and date of birth were not present on the file of non-deployed veterans, we requested a second file for non-deployed veterans that contained sex and date of birth. On the second file provided by the VA, sex and date of birth were recorded only for the non-deployed veterans who had received mental health services in the last 24 months.

A medical variable that was present on both data files was ANYMH24, an indicator for the use of VA mental health services in the last 24 months. The proportions of veterans in the provided samples that have used VA mental health services in the last 24 months was 30 percent for deployed veterans and 11 percent for veterans who had not been deployed. Another medical variable that was present on both data files was OPALL_CNT24, the number of mental health outpatient encounters with a mental health diagnosis code in the last 24 months. This variable was recorded only for records in which ANYMH24 indicated the veteran had received mental health services in the last 24 months. When OPALL_CNT24 was not missing it was positive for 67 percent of deployed veterans and for 57 percent of non-deployed veterans. Table A-1b contains additional information about the distribution of OPALL_CNT24 for those veterans who had used VA mental health services in the last 24 months.

There are several different objectives in using stratification for selecting the second-phase sample. One objective is to oversample low-prevalence domains in order to improve the precision of domain

TABLE A-1b Distribution of the Non-Missing Values of OPALL_CNT24, the Number of Mental Health Outpatient Encounters with a Mental Health Diagnosis Code in the Last 24 Months

	Statistic	Deployed	Not Deployed
OPALL_CNT24 = 0	Number of records	47,118	33,893
	Proportion of records	33%	43%
OPALL_CNT24 > 0	Number of records	94,658	45,456
	Proportion of records	67%	57%
	Mean	17.0	17.8
	Minimum	1	1
	First quartile	3	3
	Median	6	7
	Third quartile	15	16
	Maximum	1,438	1,002

estimates and to increase the power of associated statistical tests. *We plan to create major strata based on sex (where possible), deployment status, and ANYMH24 in order to oversample female veterans, deployed veterans, and veterans who used VA mental health services.*

A second objective for stratification is to increase the sampling rates for veterans who are expected to respond at lower rates than other veterans. Westat's experience in conducting the 2010 National Survey of Veterans was that young veterans have lower response rates than older veterans. The result of increasing the sampling rates for younger veterans is they then have lower base sampling weights, which then compensate for their higher non-response adjustment factors. The reduced variability in the final, adjusted, weights reduces the loss in precision due to weighting. *We plan to create two substrata within each major stratum: a substratum for veterans younger than 30, which we will over-sample to compensate for their lower expected response rates, and a substratum of veterans age 30 and above.*

A third objective for stratification is to provide a balanced representation of the first-phase sample with respect to certain stratification factors, thereby improving the precision of the survey estimates. *For this objective, we plan to create implicit strata by sorting the cases within each explicit stratum by one or more variables and then using equal-probability systematic sampling to select the sample from the explicit strata. For the strata containing users of VA mental health services, the primary sorting variables will be OPALL_CNT24, the number of mental health outpatient encounters with a mental health diagnosis code in last 24 months, and the secondary sorting variable will be the veteran's date of birth. For strata that do not contain users of VA mental health services, the sorting variables for deployed veterans will be military component (active or reserve) and rank, and will be ZIP code for non-deployed veterans. This implicit stratification will increase the representativeness of the second-phase sample of the first-phase sample and, in turn, of the population of OEF/OIF/OND veterans.*

Table A-2a describes 13 created sampling strata for selection of the 2nd phase sample and specifies the variables used to sort the cases to be exposed to sampling within each stratum. The veterans assigned to Stratum 1 are those who were not deployed and have not received any mental health services from VA in the last 24 months. Information about sex and date of birth was not available for nearly all veterans in Stratum 1 but was available for all veterans in the other strata. Hence, it was not possible to further stratify Stratum 1 by sex and age. Table A-2b contains for each stratum the size of the first- and second-phase samples. Table A-2c indicates the distribution of the expected number of completed surveys with respect to the values of the variables used to define the major strata.

TABLE A-2a Definitions of Strata for Selection of the Second Phase Sample

Deployed?	Use VA's MH Services	Sex	Age Category	Stratum #	Sorting Variables
No	No	unav	unav	1	ZIP code
	Yes	Female	<30	2	Primary: OPALL_CNT24
			30+	3	Secondary: Date of birth
		Male	<30	4	
			30+	5	
Yes	No	Female	<30	6	Primary: Military component
			30+	7	Secondary: Rank
		Male	<30	8	
			30+	9	
	Yes	Female	<30	10	Primary: OPALL_CNT24
			30+	11	Secondary: Date of birth
		Male	<30	12	
			30+	13	

TABLE A-2b Sample Sizes by Second Phase Sampling Strata

Deployed?	Use VA MH Services	Sex	Age Category	Stratum #	Sample Size	
					1st Phase	2nd Phase
No	No	unav	unav	1	645,389	7,855
		Female	<30	2	3,590	145
	30+		3	16,872	510	
	Male		<30	4	8,612	195
		30+	5	50,275	850	
Yes	No	Female	<30	6	6,183	410
			30+	7	31,046	1,535
		Male	<30	8	47,569	970
			30+	9	244,032	3,725
	Yes	Female	<30	10	3,385	165
			30+	11	14,935	545
		Male	<30	12	23,896	605
			30+	13	99,560	1,890
Total					1,195,344	19,400

Figure A-1 is an overview of the sample design. We plan to include on the survey instrument validated questions that will identify veterans with current mental health needs. These veterans are of the greatest analytic interest. Our target number of completed surveys was 4,000 such veterans—2,000 veterans who need mental health services and are using VA mental health services and 2,000 veterans who also need mental health services but who have not elected to use the mental health services provided by the VA. We expect that in addition to the 4,000 veterans identified as having current mental health needs and who complete the survey there will be additional 4,900 veterans who will complete the screener but will not be identified as having a current need for mental health services.

We determined the stratum sample sizes by first allocating the $4,000 + 4,900 = 8,900$ screener completes to the major sampling strata, based on sex, deployment status, and usage of VA mental

TABLE A-2c Expected Completes and Effective Sample Sizes for the 2nd Phase Sample

	Expected Completes	Design Effect*	All Completes		Completes for Veterans with MH Needs			Max Margin of Error* (%)
			Effective Sample Size*	Expected Completes*	Design Effect*	Effective Sample Size*		
Gender								
Female	146,430	1,917	1.8	1,076	952	1.6	585	4.1%
Male	1,048,914	7,007	1.2	5,639	3,079	1.3	2,454	2.0%
Total	1,195,344	8,924	1.3	6,643	4,031	1.4	2,978	1.8%
Use VA MH services								
No	974,219	6667	1.3	5,060	2,000	1.3	1,518	2.5%
Yes	221,125	2257	1.3	1,778	2,031	1.3	1,600	2.4%
Total	1,195,344	8924	1.3	6,643	4,031	1.4	2,978	1.8%
Deployed								
No	724,738	4397	1.2	3,533				
Yes	470,606	4527	1.4	3,336				
Total	1,195,344	8924	1.3	6,643				

*In addition to a calculated design effect associated with non-proportional allocation to the major strata, we assumed an additional design effect of 1.2 resulting from non-response adjustments to the weights.

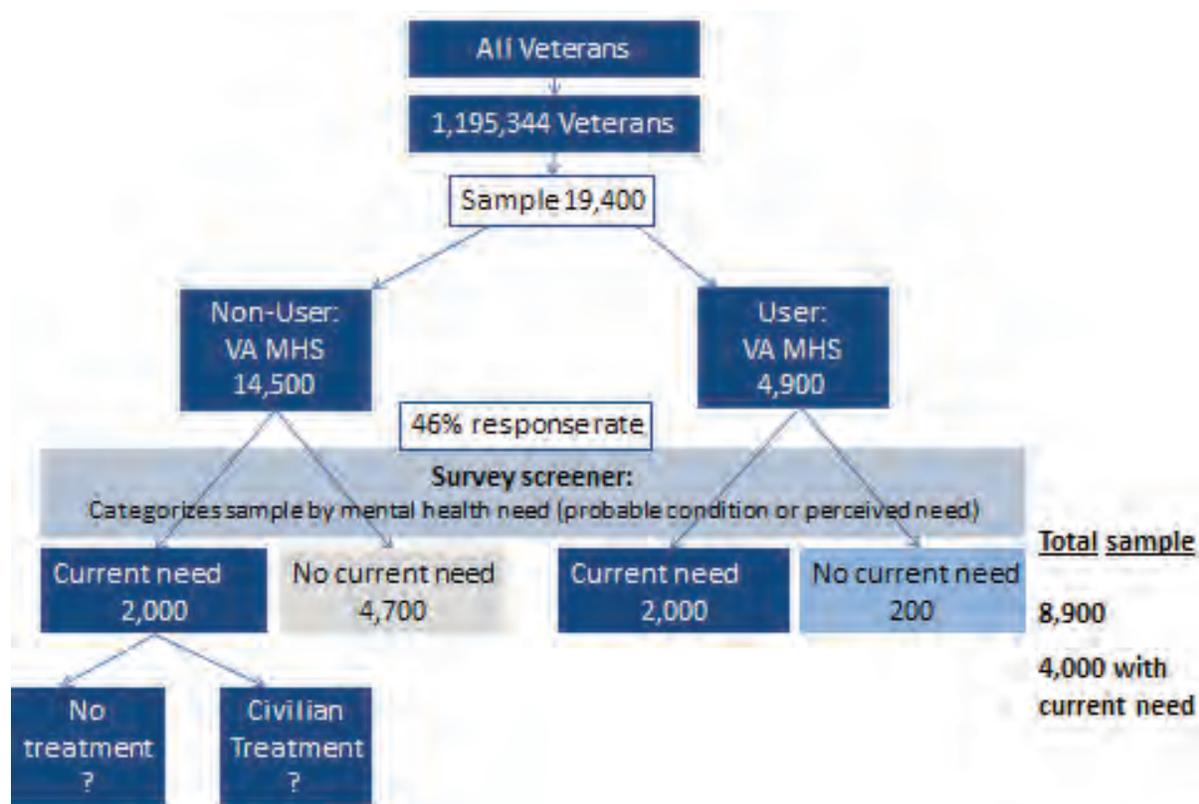


FIGURE A-1 Overview of the sampling plan.

health services. The nonlinear-program solver in Excel was used to determine the allocation of the 8,900 screener completes to the major sampling strata so that the distribution of completed surveys indicated in Figure A-1 was achieved and desired oversampling—described in more detail below—was also achieved, yet the loss in precision for overall estimates was minimized. The design effect for overall estimates due to the disproportionate allocation to the major strata was 1.1. Fielded sample sizes were then determined for each stratum by assuming that the overall response rate would be 46 percent—also described in more detail below—and assuming that the response rate for veterans younger than 30 would be 75 percent of the response rate for veterans age 30 and above.

Whether or not we will need to under- or over-sample the veterans using VA-provided mental health services to achieve the targets specified in Figure A-1 will depend on the proportion of veterans who have used VA mental health services and the proportion of them in current need of mental health services. Based on results in Seal et al. (2010),² we had assumed in the earlier version of this document that approximately 24 percent of OEF/OIF/OND veterans were users of VA mental health services. Table 2 in Elbogen et al. (2013)³ indicates that 43.2 percent of Iraq and Afghanistan veterans screened positive

²Seal, K. H., S. Maguen, B. Cohen, K. S. Gima, T. J. Metzler, L. Ren, D. Bertenthal, and C. R. Marmar. 2010. VA mental health services utilization in Iraq and Afghanistan veterans in the first year of receiving new mental health diagnoses. *Journal of Traumatic Stress* 23:5–16. doi.org/10.1002/jts.20493.

³Elbogen, E. B., H. R. Wagner, S. C. Johnson, P. Kinneer, H. Kang, J. J. Vasterling, C. Timko, and J. C. Beckham. 2013. Are Iraq and Afghanistan veterans using mental health services? New data from a national random-sample survey. *Psychiatric Services* 64:134–141.

TABLE A-3 Fielded Sample Sizes, Number of Respondents, and Number of Screened-Positive Completed Surveys

	Users of VA-Provided Mental Health Services	Non-Users of VA-Provided Mental Health Services	Total Sample
Fielded sample	4,900	14,500	19,400
Assumed response rate	46%	46%	
# respondents	2,200	6,700	8,900
Assumed screened-positive rate	90%	30%	
# completed screened positive surveys	2,000	2,000	4,000

NOTE: Screened-positive refers to those veterans who had a positive result on at least one of the mental health screeners administered as part of the survey.

for posttraumatic stress disorder (PTSD), major depression, or alcohol misuse. Thus, if nearly all of the estimated 24 percent of OEF/OIF/OND veterans who have used VA mental health services were to be identified by the survey instrument as currently needing mental health services—say, 22 percent out of 24 percent—then approximately half of the veterans in need of mental health services would be receiving such care from the VA and half would not. In this case, the same sampling fraction could be used for the two groups. *However, the administrative data provided to us by the VA permitted us to estimate that only 18.5 percent of OEF/OIF/OND veterans were users of VA mental health services. Because this estimate is lower than our earlier assumption, it was necessary to over-sample veterans who are users of VA mental health services.* A large screening sample size of non-users was also needed because only some of those sampled will have a current mental health need, a subpopulation of interest in this study.

We assume that the unweighted Web response rate will be approximately 20 percent and the follow-up computer-assisted telephone interview (CATI) response rate among Web non-respondents will be approximately 33 percent.⁴ Hence, the overall assumed response rate is approximately $0.20 + (1-0.20)*0.33 = 46$ percent. Table A-3 shows how the total fielded sample size needs to be approximately 19,400. Because it is possible that the overall response rate will be less than 46 percent, we plan to select 38,800 veterans initially for the second-phase sample. We will randomly partition the initial second-phase sample into a main sample of 19,400 veterans that will be fielded at the beginning of the data collection period and a reserve sample of 19,400 veterans that will be set aside for use if response rates or rates of eligibility are lower than expected. The reserve sample will be randomly partitioned into multiple *release groups* within each sampling stratum so that, if necessary, the size of the fielded sample can be increased incrementally on a stratum-by-stratum basis.

In general, the sample size is large enough to support analyses of numerous subgroups with high levels of precision. Table A-4 contains the estimated maximum margins of error (MOEs) for domain-level proportions and the associated worst-case minimum detectable effects (MDEs) for non-specific domains as a function of the prevalence of the domain and its complement in the veteran population.⁵ These worst-case measures occur when the estimated proportions are equal to 50 percent.

⁴We considered a three-phase sample design in which the second-phase sample described above was modified to use CATI data collection only in a subsample of the web respondents. We found, however, that this modification decreased precision when using the double sample estimator described by Hansen and Hurwitz (1946) and produced only modest gains in precision for an alternative estimator. Hansen, M. H., and W. N. Hurwitz. 1946. The problem of nonresponse in sample surveys. *Journal of the American Statistical Association* 41:517–529.

⁵Calculated margins of error and maximum detectable effects in Tables A-4 through A-6 are based on sampling variances for a stratified sample in which the maximum margin of error for an overall estimate of a proportion is equal to 1.8 percent.

TABLE A-4 Maximum MOEs^a and Worst-Case MDEs (over all possible comparisons) for Non-Specific Domains for Veterans Identified as Currently Needing Mental Health Services

Prevalence of Domain in Population	Maximum MOE	Worst-Case MDE Between Domain and Balance of Population (%)
10%	5.8%	8.7%
90%	1.9%	
20%	4.1%	6.6%
80%	2.0%	
30%	3.3%	5.7%
70%	2.2%	
40%	2.9%	
60%	2.4%	5.4%

^aMOEs are half-widths of 95 percent confidence intervals about an estimate of 50 percent. MDE calculations are for two-tailed 95% confidence tests with 80% power.

As Table A-4 shows, for the sample of 4,000 veterans who screen as having a current mental health condition, we can further divide this group and still be able to detect differences between groups of 8.7 percent or better. For example, an analysis may be conducted to compare survey results for younger (ages 18–24) versus older (age 25 and older) OEF/OIF/OND veterans with mental health needs. Based on Seal et al. (2010), these proportions may be approximately 33 percent (younger) versus 67 percent (older). A relatively small difference of 5.7 percent in survey results would be necessary to detect a statistically significant difference between these two veteran subgroups with 80 percent power. Additionally, if we compare groups within the full sample of 8,900 respondents such as VA mental health users versus non-users, the MDEs will be even smaller. As such, the sample size and tiered structure give a great deal of flexibility in the comparisons that can be supported.

Table A-5 indicates the margin of errors for estimated proportions other than 50 percent. For example, for the domain of younger veterans (with a prevalence of about 30 percent), an associated estimated proportion of 50 percent has a MOE of 3.3 percent, but an estimated proportion of 5 percent or 95 percent has a margin of error of only 1.4 percent.

Table A-6 indicates worst-case MDEs for estimated proportions other than 50 percent. For example, for comparing a proportion estimated from data for younger veterans to a proportion estimated from the data for older veterans, both Table A-4 and Table A-6 indicate that the worst-case MDE over all

TABLE A-5 MOEs for Estimated Proportions in Non-Specific Domains for Veterans Identified as Currently Needing Mental Health Services

Prevalence of Domain in Population	Estimated Proportion			
	50%	25% or 75%	10% or 90%	5% or 95%
10%	5.8%	5.0%	3.5%	2.5%
20%	4.1%	3.5%	2.5%	1.8%
30%	3.3%	2.9%	2.0%	1.5%
40%	2.9%	2.5%	1.7%	1.3%
50%	2.6%	2.2%	1.6%	1.1%
60%	2.4%	2.0%	1.4%	1.0%
70%	2.2%	1.9%	1.3%	1.0%
80%	2.0%	1.8%	1.2%	0.9%
90%	1.9%	1.7%	1.2%	0.8%
100%	1.8%	1.6%	1.1%	0.8%

TABLE A-6 Worst-Case MDEs for Comparing a Proportion Estimated for a Non-Specific Domain to a Proportion Estimated for the Balance of the Population for Veterans Identified as Currently Needing Mental Health Services

Prevalence of Domain in Population	Estimated Proportion That Is Closer to 50%			
	50%	25% or 75%	10% or 90%	5% or 95%
10% or 90%	8.8%	7.6%	5.3%	3.8%
15% or 85%	7.4%	6.4%	4.4%	3.2%
20% or 80%	6.6%	5.7%	4.0%	2.9%
30% or 70%	5.8%	5.0%	3.5%	2.5%
40% or 60%	5.4%	4.7%	3.2%	2.3%
50%	5.3%	4.6%	3.2%	2.3%

possible comparisons of two proportions is 5.8 percent. If, however, the two proportions being compared are very small so the proportion that is closer to 50 percent is less than or equal to 10 percent, then the worst-case MDE is only 3.5 percent.

Over-sampling affects the precision of associated estimates. For example, the over-sampling of female veterans will increase the precision of statistics computed for female veterans. Similarly, since veterans who have used VA mental health services are over-sampled, there will be an increase in the precisions computed for such veterans. Over-sampling low-prevalence domains, however, can decrease the precision of overall estimates and the precision of estimates for high-prevalence domains that cut across multiple strata in which one or more of the strata are disproportionately allocated.

Table A-7 is from the appendix of the earlier version of this document, and it contains predicted maximum MOEs for estimated proportions and the associated worst-case MDEs for domains based on gender or the usage of VA mental health services, taking into account the decreases in precision due to over-sampling female veterans with an over-sampling factor of 2.0. *The actual second-phase sample over-sampled females, deployed veterans, and users of VA mental health services by factors of 2.0, 1.6, and 1.5, respectively. Sex was missing in the VA-provided data for nearly all veterans assigned to Stratum 1, so females were not oversampled in Stratum 1. By using VA's VetPop model, however, we were able to estimate the proportion of female veterans in Stratum 1 and thus were able to compute an overall over-sampling factor for females across all the sampling strata. Table A-8 is the same as Table A-7, except it is based on the actual, instead of planned, second-phase sample. Comparing Tables A-7 and A-8, it can be seen that compared to the planned sample the actual sample has less power to*

TABLE A-7 Planned-Sample Predictions of MOEs^a and Worst-Case MDEs for Estimated Proportions for Domains Based on Gender or Usage of VA Mental Health Services for Veterans Identified as Currently Needing Mental Health Services

	Maximum MOE			Worst-Case MDE Across User Status
	Female Veterans	Male Veterans	All Veterans	
Users of VA mental health services	4.6%	3.0%	2.7%	5.3%
Non-users of VA mental health services	4.4%	2.9%	2.5%	
All veterans	3.2%	2.1%	1.8%	
Worst-case MDE across sex (%)	5.9%			

^aMOEs are half-widths of 95 percent confidence intervals about an estimate of 50 percent. MDE calculations are for two-tailed 95% confidence tests with 80% power.

TABLE A-8 Actual-Sample Estimates of MOEs^a and Worst-Case MDEs for Estimated Proportions for Domains Based on Gender or Usage of VA Mental Health Services for Veterans Identified as Currently Needing Mental Health Services

	Maximum MOE			Worst-Case MDE Across User Status
	Female Veterans	Male Veterans	All Veterans	
Users of VA mental health services	4.5%	2.8%	2.4%	4.5%
Non-users of VA mental health services	6.9%	2.7%	2.5%	
All veterans	4.1%	2.0%	1.8%	
Worst-case MDE across sex (%)	6.6%			

^aMOEs are half-widths of 95 percent confidence intervals about an estimate of 50 percent. MDE calculations are for two-tailed 95% confidence tests with 80% power.

determine that male-versus-female differences are significantly different but has more power to test for significant differences between users and non-users of VA mental health services.

Table A-7 indicates that the worst-case MDE across sex was estimated to be 5.9 percent for the planned sample, but for the actual sample it is estimated to be 6.6 percent. We had considered over-sampling veterans with female first names in Stratum 1, but because of the need to select the sample expeditiously we did not do so. Had we done this, the loss in power for testing male-versus-female differences would possibly have been reduced but not eliminated, because there will be some misclassification when using a veteran's first name to predict his or her sex.

The main and reserve second-phase samples have already been selected, and identifiers for the sampled veterans have been sent to VA to obtain their Social Security numbers to be used in address tracing. If it is felt necessary, to attempt to over-sample female veterans in Stratum 1, this could be done by using the veteran's first name to predict sex in Stratum 1 of both the main and reserve second-phase samples. Then some of the predicted female veterans in Stratum 1 of the reserve sample could be reassigned to the main sample, and an equal number of predicted male veterans in Stratum 1 of the main sample reassigned to the reserve sample.

Weighting and Non-Response Bias Analysis

Office of Management and Budget guidelines require that a non-response bias analysis (NRBA) be conducted when the response rate for a federally sponsored survey is less than 80 percent, which we expect will be the case for this survey. Because one of the reasons for developing and then using analysis weights is to reduce the non-response bias in resulting estimates, an NRBA includes many of the analysis procedures we use in developing weights and in verifying that they were calculated correctly. In the remainder of this section, we describe the procedures we will use to develop the analysis weights and then describe the associated data analyses we plan to perform to support the weighting procedures and/or the NRBA.

A non-response adjusted sample weight will be calculated for each respondent regardless of whether or not the respondent screened positive for needing mental health services. These weights will permit Westat and IOM project staff to estimate the means, percentages, and totals from the collected data that will be representative of the population of OEF/OIF/OND veterans. The same weights can be used to calculate subclass means for the veterans who screen positive for needing mental health services. For this purpose it will be necessary for analysts to perform domain analyses in which the domain variable is the survey outcome for screening positive.

The goal of weighting is to make the weighted survey estimates approximately unbiased for the corresponding population parameters. The weights first reflect the selection probabilities of the sampled veterans (the base weights) and then adjustments to the base weights to compensate for non-response and to make the weighted distributions for some key variables conform to known or well-estimated distributions for those variables. Because the proposed sample design is for a two-phase sample, the weights will be the product of a first-phase weight and a second-phase weight. The first-phase weight will be the reciprocal of the sampling rate for the first-phase sample, which according to the RFP is approximately 25 percent. Thus, the first-phase weight will be approximately 4. To calculate the first-phase weight, we are dependent on first-phase sampling information being provided by the VA. However, the first-phase weight is not needed for estimating rates and averages, but it is needed to estimate totals.

Our calculation of weights will consist of the following steps:

- Calculating second-phase base weights, which are the reciprocals of the conditional probability that a veteran was selected for the second-phase sample given that the veteran had been selected for the first-phase sample selected by the VA.
- Using the VA-provided information for the veterans in the first-phase sample (contained in a subset of the 27 frame variables) to adjust the second-phase base weights for non-response. Depending on the number of frame variables being used (see discussion below about the data analysis procedure to be used to select the variables), this step will either use the frame variables to create post-stratification cells and the associated cell totals or will use the frame variables to compute control totals from the first-phase sample for use in raking the second-phase base weights.
- Raking the final weights (the product of the first- and second-phase weights), if population control totals are available and if VA provides the first-phase weights, to available population totals.
- Determining the variability of the final weights and the presence of outliers. If there are outliers in the final weights that would cause large losses in precision due to weight variability, they will be trimmed to reduce the variability of the weights.

We plan to carry out three analyses of the survey's non-response properties, using a dataset that contains the computed weights and the frame data provided by the VA for all veterans in the first-phase sample. The first analysis will compare the second-phase survey response rates for different levels of categorical frame variables. These variables include gender, military service branch, military service component, rank at separation (enlisted versus officer), deployment status, and whether or not the veteran used VA-provided mental health care services. This first analysis will be included in the NRBA, and we will also use it to indicate which frame variables we will use in weighting to create post-stratification cells or to rake the second-phase base weights. The second analysis will use multiple sets of weights to compare weighted distributions of the categorical frame variables used in the first analysis. There will be four sets of weighted estimates that will be compared:

- Using data for all veterans in the first-phase sample, the estimated frequencies computed with first-phase weights (with an equal probability first-phase sample, this can be an unweighted calculation);
- Using data for all veterans sampled for the second-phase sample, the estimated frequencies computed with second-phase base weights;
- Using data for all veterans responding to the second-phase sample, the estimated frequencies computed with second-phase base weights; and
- Using all veterans responding to the second-phase sample, computed with final base weights (that is, the product of the first- and second-phase weights).

This second analysis, which will be included in the NRBA, will also be able to identify additional frame variables that should be used in creating non-response adjustment cells. This analysis permits one to estimate the non-response bias in subgroup means for each variable being analyzed. Hence, this analysis allows us to check if the weighting adjustments were effective because the estimated non-response biases for the variables used to make weighting adjustments should be essentially zero.

The third analysis will be similar to the second analysis but will compare weighted means computed from the following continuous frame variables and will also compare estimated regression coefficients for a set of models in which the dependent variable in each model is one of the following variables:

- For each veteran, the total number of VA outpatient health care encounters since separation;
- For each veteran, the total number of VA inpatient health care stays since separation;
- For each veteran, the total number of VA outpatient mental health service encounters since separation, defined as an encounter in which the diagnosis includes and *ICD-9* code in the subset of mental health *ICD-9* codes; and
- For each veteran, the total number of VA inpatient mental health service stays since separation, defined as an encounter in which the diagnosis includes an *ICD-9* code in the subset of mental health *ICD-9* codes.

Weighting Procedures

Westat received two first-phase-sample files from the VA. One file, containing 470,606 records, contained information for a sample of OEF/OIF/OND veterans who have had been deployed to Iraq or Afghanistan and, according to VA records, were alive on October 1, 2015. The data source for this file was the OEF/OIF/OND roster file. The second file, containing 724,738 records, contained information for a sample of OEF/OIF/OND veterans who were not deployed to Iraq or Afghanistan. The VA created this second file from multiple administrative data sources, with a veteran's demographic variables being included only if the veteran appeared in VA medical records.

Westat combined the two VA-provided data files to create a sampling frame for the selection of a stratified second-phase sample. The stratification variables for the second-phase sample were deployment status (2 levels: yes or no), usage of VA mental health services (2 levels: yes or no/missing), sex (3 levels: male, female, missing), and age category (2 levels: <30, 30+, and missing). Table A-9 describes the second-phase sampling strata and the size of the first- and second-phase samples associated with these strata.

Response Rates and Comparisons of Respondents and Non-Respondents

Table A-10 contains weighted and unweighted response rates⁶ by stratum and for levels of other categorical variables present on the sampling-frame file. The weights that were used to compute the weighted response rates are the overall base weights with respect to both the first- and second-phase samples. (The calculation of the overall base weights is described in a separate memo about the weighting process.) For these same categorical variables, Table A-11⁷ contains the results of a chi-square test of the association between the response status and the levels of the categorical variable. The p-values in Table A-11 incorporate the second-order Rao–Scott correction.

⁶Revised from an earlier version of this document.

⁷Revised from an earlier version of this document.

TABLE A-9 Second-Phase Sampling Strata

Deployed?	Use VA MH Services	Sex	Age	Stratum #	Sample Size		
					1st Phase	2nd Phase	
No	No	Missing	Missing	1	645,389	7,855	
	Yes	Female	<30	2	3,590	145	
			30+	3	16,872	510	
		Male	<30	4	8,612	195	
			30+	5	50,275	850	
Yes	No	Female	<30	6	6,183	410	
			30+	7	31,046	1,535	
		Male	<30	8	47,569	970	
			30+	9	244,032	3,725	
		Yes	Female	<30	10	3,385	165
				30+	11	14,935	545
	Male		<30	12	23,896	605	
			30+	13	99,560	1,890	
				Total		19,400	

CHAID Trees

Because of the number of categorical variables present on the sampling-frame file, we decided to use the CHAID algorithm to develop the cells to be used to compute non-response adjustment factors. For the CHAID analyses, instead of using only the two age categories of <30 and 30+ that were used to define the sampling strata, we used the more detailed age categories shown in Table A-10.

Below is a CHAID classification tree consisting of 21 leaves for survey response by veterans who were deployed to Iraq or Afghanistan. There is a similar tree consisting of 8 leaves for survey response by veterans who were not deployed to Iraq or Afghanistan. The information above the nodes indicates the names and associated levels of the variables that define the nodes. See Tables A-9 and A-10 for descriptions of the variable levels. The N value for each node is the number of associated fielded veterans. The 1 and 2 proportions for each node are the associated unweighted response and non-response rates, respectively. (We will use weighted response rates when we compute the non-response adjustment factors associated with the leaves of the tree.) No pruning of the classification trees was performed, but when growing each tree, the required minimum leaf size was 50.

Tables A-12a and A-12b list the variables the CHAID analyses selected to define the classification trees. Tables A-12a and A-12b also include the listed variables' *importance*, which is a data-mining metric based on a variables' contribution to reducing the residual sum of squares, and *count*, which is the number of times a variable is used by the CHAID algorithm to split a node of the tree into two children nodes.

All of the results in this memorandum were obtained by analyzing data in Westat's high-security enclave, where there is a strict protocol for the installation of approved software. We developed the CHAID trees using SAS's PROC HPSPLIT, because the SAS/STAT procedures have been approved for use in the high-security enclave. Unlike other implementations of the CHAID algorithm, SAS's PROC HPSPLIT does not permit the use of weights. Nevertheless, the leaves of the developed trees can still be used to define non-response adjustment cells, which a Westat-developed SAS macro, named CollAdj, will analyze in order to compute non-response adjustment factors based on weighted response rates and will compute metrics to allow Westat statisticians to determine if there should be any collapsing of cells. A recent simulation study conducted by Lohr, Hsu, and Montaquila (2015) suggests that not

TABLE A-10 Response Rates (calculated with AAPOR RR3 formula) for Levels of Sampling-Frame Categorical Variables

Variable	Description	Level Number	Weighted RR3 (%)	Unweighted RR3 (%)
OVERALL			20.4	22.0
STRATUM	See Table 1	1	17.2	17.2
		2	20.7	20.7
		3	30.8	30.8
		4	20.0	20.0
		5	26.4	26.4
		6	22.4	22.4
		7	28.2	28.2
		8	18.8	18.8
		9	25.0	25.0
		10	24.8	24.8
		11	31.7	31.7
		12	16.4	16.4
		13	27.3	27.3
ANYMH24_R	Use VA mental health services	1	26.1	26.1
	Do not use VA mental health services or missing	14	19.2	20.6
ANYVAHLTH_R	Use VA health services	1	27.3	27.2
	Do not use VA health services or missing	14	17.8	19.1
ISCTYPE2, Type of separation	Enlisted, expiration of term of service	1	21.1	21.8
	Enlisted, early release	2	19.2	19.4
	Enlisted, disability	3	18.1	19.9
	Enlisted, unqualified	4	28.9	27.2
	Enlisted, retirement	5	31.8	31.9
	Enlisted, drugs	6	17.9	18.4
	Enlisted, pregnancy or parenthood	7	24.4	25.0
	Enlisted, other	8	20.4	21.2
	Officer, expiration of term of service	9	30.2	27.3
	Officer, voluntary release	10	31.7	31.0
	Officer, retirement	11	40.4	40.5
	Officer, other	12	24.9	30.0
	Missing	14	19.6	21.1
RACE_R	White	1	28.3	28.0
	Black	2	28.1	28.9
	Asian	3	25.9	25.6
	Other	4	23.2	23.0
	Missing	14	17.8	19.1
SEX_R	Female	1	28.5	28.0
	Male	2	24.5	24.2
	Unknown	3	17.2	17.2
UNITCODE_R	Active	1	23.6	23.9
	Reserve	2	26.7	26.8
	Missing	14	18.2	18.9
AGECAT_R	<24	1	16.4	16.5
	25–29	2	18.8	19.5
	30–34	3	21.0	22.2

continued

TABLE A-10 Continued

Variable	Description	Level Number	Weighted RR3 (%)	Unweighted RR3 (%)
	35–39	4	23.2	24.1
	40–44	5	24.3	25.2
	45–49	6	32.3	32.2
	50–54	7	32.4	33.8
	55–59	8	36.6	35.9
	60–65	9	39.3	39.9
	66+	10	38.2	37.7
	Missing	14	16.2	16.2
NUM_DEPLOY2, number of deployments	1	1	24.5	24.5
	2	2	24.2	25.1
	3	3	25.2	25.1
	4	4	26.1	26.1
	5+	5	27.5	27.7
	Zero or missing	14	18.2	18.9
RANKD_R, pay grade	E1-E3	1	19.1	19.8
	E4	2	21.2	22.3
	E5	3	26.6	26.2
	Other enlisted	4	33.7	34.2
	Warrant officers	5	39.6	40.0
	Commissioned officers	6	33.9	33.8
	Missing	14	18.2	18.9
SVC_PCT2, service disability percent	10–40	1	28.1	27.9
	50+	2	28.5	28.8
	Zero or missing	14	18.6	20.0

using weights when using tree-based methods to develop non-response adjustment cells is superior to using weights.⁸

Non-Response Bias Analysis

Tables A-13 and A-14 compare the estimated bias in weighted second-phase-sample estimates computed with overall base weights versus final weights. Each table contains estimates computed for variables present on the first-phase-sample file of VA-provided administrative data. The two sets of weights—overall base weights and final weights—for the respondents to the second-phase sample, along with the corresponding administrative data, were used to compute the second-phase-sample estimates. The bias in each second-phase-sample estimate was estimated by subtracting from the estimate the weighted estimate computed from the first-phase-sample base weights and the administrative data for all of the first-phase sample cases.

Table A-13 compares the estimated biases for base-weighted and final-weighted estimated proportions computed for the following categorical variables present on the first-phase-sample file of VA-provided administrative data:

⁸Lohr, S., V. Hsu, and J. Montaquila. 2015. Using classification and regression trees to model survey nonresponse, *Proceedings of the Survey Research Section*, American Statistical Association, pp. 2071–2085.

TABLE A-11 Test for Association Between Response Status and Levels of Sampling-Frame Categorical Variables^a

Variable	Description	Respondents		Non-Respondents		CHISQ	P_VALUE
		Percentage	Stdrd Err	Percentage	Stdrd Err		
STRATUM	See above	50.8	0.62	62.4	0.16	285.4580	<.0001
		0.3	0.05	0.3	0.01		
		2.4	0.17	1.4	0.04		
		0.8	0.11	0.8	0.03		
		6.1	0.21	4.3	0.05		
		0.5	0.06	0.4	0.02		
		3.0	0.10	1.9	0.03		
		3.0	0.18	3.4	0.05		
		20.7	0.53	15.9	0.14		
		0.3	0.04	0.2	0.01		
		1.6	0.07	0.9	0.02		
		1.3	0.14	1.7	0.04		
		9.2	0.43	6.3	0.11		
		100.00		100.0			
ANYMH24_R	Use VA mental health services	22.0	0.51	16.0	0.13	89.3850	<.0001
	Do not use VA mental health services or missing	78.0	0.51	84.0	0.13		
ANYVAHLTH_R	Use VA health services	36.4	0.76	24.8	0.31	143.8640	<.0001
	Do not use VA health services or missing	63.6	0.76	75.2	0.31		
ISCTYPE2, type of separation	Enlisted, expiration of term of service	100.0		100.0		83.3751	<.0001
		10.0	0.46	9.6	0.14		
		0.9	0.11	1.0	0.07		
		1.4	0.14	1.6	0.08		
		0.6	0.10	0.4	0.04		
		4.7	0.23	2.6	0.08		
		0.5	0.09	0.5	0.06		
		0.4	0.06	0.3	0.03		
		2.0	0.17	2.0	0.10		
		0.6	0.11	0.4	0.03		
		0.6	0.11	0.3	0.04		
		1.5	0.16	0.6	0.05		
		0.2	0.05	0.1	0.03		
		76.5	0.61	80.5	0.20		
RACE_R	White	100.0		100.0		170.7225	<.0001
		22.4	0.69	14.5	0.26		
		7.2	0.35	4.7	0.16		
		1.1	0.16	0.8	0.08		
		5.6	0.37	4.8	0.17		
		63.6	0.76	75.2	0.31		
		100.0		100.0			

continued

TABLE A-11 Continued

Variable	Description	Respondents		Non-Respondents		CHISQ	P_VALUE
		Percentage	Stdrd Err	Percentage	Stdrd Err		
SEX_R	Female	8.1	0.23	5.2	0.06	255.1879	<.0001
	Male	41.2	0.62	32.4	0.16		
	Unknown	50.8	0.62	62.4	0.16		
		100.0		100.0			
UNITCODE_R	Active	22.7	0.58	18.8	0.18	122.4881	<.0001
	Reserve	17.0	0.50	11.9	0.15		
	Missing	60.3	0.61	69.2	0.16		
		100.0		100.0			
AGECAT_R	<24	0.5	0.09	0.7	0.05	262.7585	<.0001
	25–29	6.1	0.27	6.8	0.11		
	30–34	11.1	0.46	10.7	0.20		
	35–39	9.3	0.37	7.9	0.17		
	40–44	6.2	0.38	4.9	0.14		
	45–49	7.7	0.31	4.1	0.13		
	50–54	6.7	0.35	3.6	0.13		
	55–59	4.2	0.33	1.9	0.10		
	60–65	2.5	0.25	1.0	0.07		
	66+	2.3	0.29	0.9	0.09		
	Missing	43.4	0.78	57.6	0.28		
		100.0		100.0			
NUM_ DEPLOY2, number of deployments	1	17.5	0.50	13.8	0.19	125.9334	<.0001
	2	11.6	0.43	9.2	0.18		
	3	4.8	0.28	3.6	0.11		
	4	2.6	0.19	1.9	0.09		
	5+	3.2	0.22	2.2	0.10		
	Zero or missing	60.3	0.61	69.2	0.16		
		100.0		100.0			
RANKD_R, pay grade	E1–E3	9.5	0.34	10.3	0.12	245.8406	<.0001
	E4	9.4	0.35	8.9	0.11		
	E5	5.8	0.24	4.1	0.08		
	Other enlisted	9.0	0.31	4.5	0.09		
	Warrant officers	0.6	0.08	0.2	0.02		
	Commissioned officers	5.4	0.29	2.7	0.07		
	Missing	60.3	0.61	69.2	0.16		
		100.0		100.0			
SVC_PCT2, service disability percent	10–40	9.4	0.42	6.2	0.19	136.1223	<.0001
	50+	16.1	0.58	10.3	0.20		
	Zero or missing	74.6	0.67	83.5	0.28		
		100.0		100.0			

^aBase weights and associated replicate weights were used to compare the categorical distributions respondents and other nonrespondents. P-value incorporates second-order Rao–Scott correction.

- **Use of VA Health Services.** The proportion of veterans who use VA health services was more than 10 percentage points higher when estimated with the overall base weights than when estimated with the final weights due to the higher response rates of veterans who use VA health services. (See Table A-10.) The estimated bias in the base-weighted estimate is slightly less than 10 percentage points, whereas the estimate bias in the final-weighted estimate is less than 1 percentage point.

TABLE A-12a Variables Selected by CHAID to Define the Classification Tree for Response by Deployed Veterans^a

Variable	Description	Importance	Relative Importance	Count
RANKD_R	Pay grade	8.14	1.00	3
RACE_R	Race	4.45	0.55	3
ISCTYPE2	Type of military separation	2.83	0.35	2
SEX_R	Sex	2.69	0.33	1
STRATUM	Sampling stratum	2.47	0.30	4
ANYVAHLT_R	Use of VA health services	2.29	0.28	2
AGECAT_R	Age category	1.92	0.24	4
ANYMH24_R	Use of VA mental health services	1.13	0.14	1

^aImportance is a data-mining metric based on a variable's contribution to reducing the residual sum of squares. Count is the number of times a variable is used to split a node of the tree into two children nodes.

TABLE A-12b Variables Selected by CHAID to Define the Classification Tree for Response by Non-Deployed Veterans^a

Variable	Description	Importance	Relative Importance	Count
AGECAT_R	Age category	7.87	1.00	2
ANYVAHLT_R	Use of VA health services	2.84	0.36	1
RACE_R	Race	2.25	0.29	2
STRATUM	Sampling stratum	1.46	0.19	1
SVCPCT2	Service disability percent	1.31	0.17	1

^aImportance is a data-mining metric based on reduction of residual squared error. Count is the number of times a variable is used to define a split.

- **Race.** Race is missing on many of the records in the administrative data. However, the response rate for veterans with missing race values is less than for veterans in which race is not missing, so the base-weighted estimate of the proportion of these estimates is biased downward by nearly 10 percentage points. The estimated absolute biases of the final weighted estimated proportions, on the other hand, are all less than 1 percentage point.
- **Active Versus Reserve.** The estimated absolute biases in the base-weighted estimated proportions range from 3.28 to 7.38 percentage points, whereas the estimated absolute biases of the final-weighted estimated proportions are all less than 0.2 percentage points.
- **Military Rank.** The largest estimated absolute bias in the base-weighted estimated proportion is over 7 percentage points for veterans with missing rank information in the administrative data, whereas for the final-weighted estimated proportions for categories of military rank all of the estimated absolute biases are less than 0.4 percentage points.

Table A-14 compares base-weighted and final-weighted estimated means computed for selected continuous variables present on the first-phase-sample file of VA-provided administrative data. The ratio of the absolute bias for the base-weighted estimated mean to that for the corresponding final-weighted estimated mean ranges from 2.6 to 7.8.⁹

⁹Italics indicates revision to text of an earlier version of this document.

TABLE A-13 Comparison of Estimated Bias for Weighted Proportions Computed with Overall Base Weights Versus Final Weights for Selected Categorical Variables (standard errors are shown in parentheses)

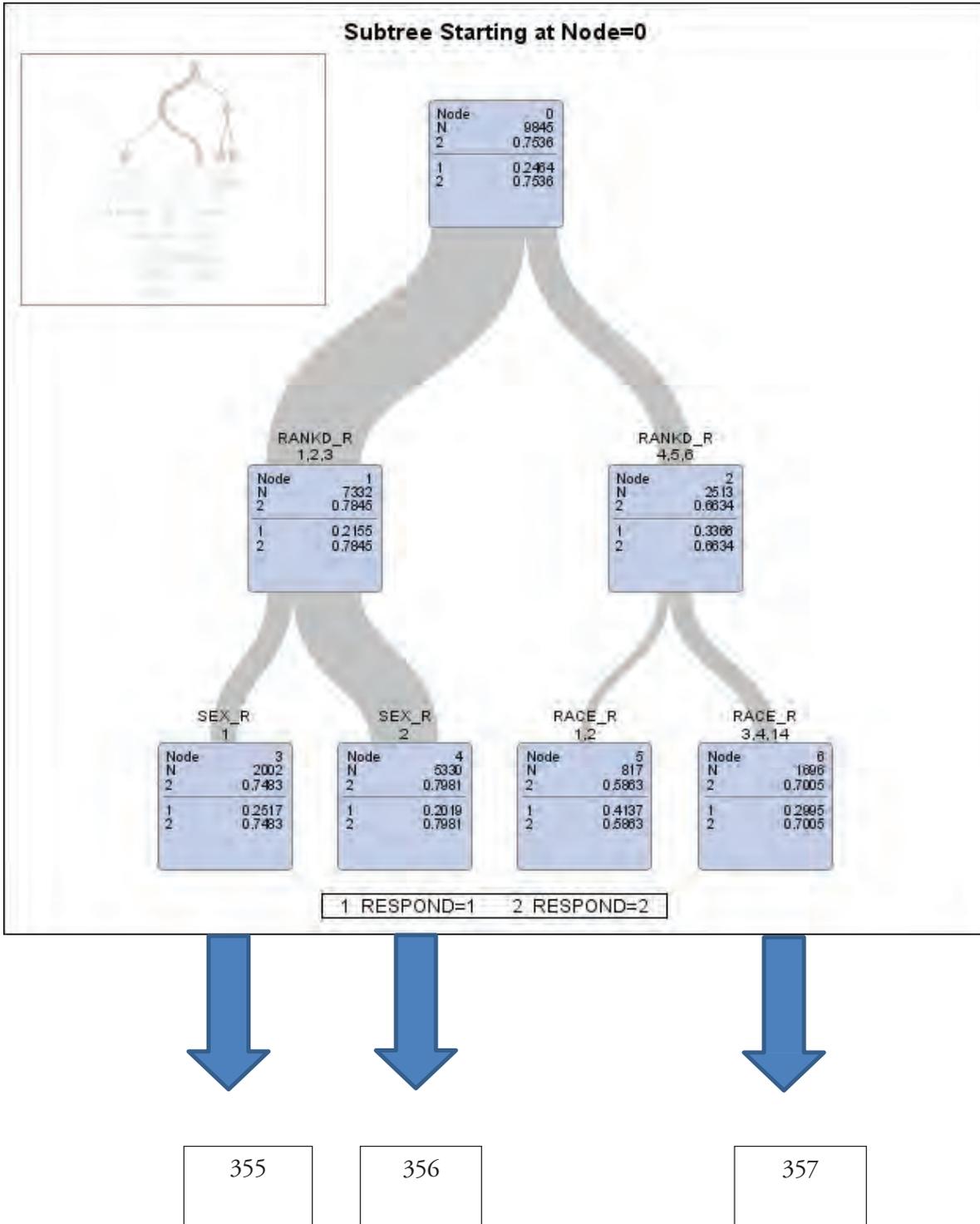
Variable	Description	Weighted Proportion (%)				2nd-Phase Sample				P Values	
		2nd-Phase Sample		1st-Phase Sample		Est. Bias (%)		2nd-Phase Sample		Base Weights	Final Weights
		Base Weights	Final Weights	Base Weights	Final Weights	Base Weights	Final Weights	Base Weights	Final Weights	Base Weights	Final Weights
ANYVAHLTH_R	Use VA health services	36.80	26.36	27.06	9.73 (0.79)	-0.70 (0.10)	<0.001	<0.001	<0.001	<0.001	
	Do not use VA health services or missing	63.20	73.64	72.93	-9.73 (0.79)	0.70 (0.10)	<0.001	<0.001	<0.001	<0.001	
RACE_R	White	22.64	16.11	16.36	6.28 (0.66)	-0.24 (0.34)	<0.001	<0.001	<0.001	0.47	
	Black	7.31	4.76	5.06	2.25 (0.39)	-0.30 (0.22)	<0.001	<0.001	<0.001	0.17	
	Asian	1.17	0.86	0.83	0.33 (0.17)	0.03 (0.13)	0.05	0.05	0.05	0.79	
	Other	5.69	4.62	4.82	0.87 (0.37)	-0.19 (0.26)	0.02	0.02	0.02	0.45	
	Missing	63.20	73.64	72.93	-9.73 (0.79)	0.70 (0.10)	<0.001	<0.001	<0.001	<0.001	
UNITCODE_R	Active	22.76	19.31	19.48	3.28 (0.62)	-0.17 (0.37)	<0.001	<0.001	<0.001	0.66	
	Reserve	16.86	12.03	12.77	4.10 (0.54)	0.17 (0.37)	<0.001	<0.001	<0.001	0.65	
	Missing	60.38	67.756	67.757	-7.38 (0.78)	-0.001 (0.00)	<0.001	<0.001	<0.001	1.00	
RANKD_R,	E1-E3	9.51	9.78	10.15	-0.64 (0.40)	-0.37 (0.25)	0.11	0.11	0.11	0.15	
pay grade	E4	9.35	9.14	8.98	0.36 (0.40)	0.16 (0.25)	0.37	0.37	0.37	0.53	
	E5	5.81	4.43	4.37	1.44 (0.33)	0.06 (0.07)	<0.001	<0.001	<0.001	0.36	
	Other enlisted	9.00	5.21	5.16	3.84 (0.41)	0.05 (0.10)	<0.001	<0.001	<0.001	0.61	
	Warrant officers	0.56	0.31	0.30	0.26 (0.11)	0.02 (0.05)	<0.001	<0.001	<0.001	0.75	
	Commissioned officers	5.39	3.35	3.27	2.12 (0.32)	0.08 (0.10)	<0.001	<0.001	<0.001	0.41	
	Missing	60.38	67.756	62.757	-7.38 (0.78)	-0.001 (0.00)	<0.001	<0.001	<0.001	1.00	

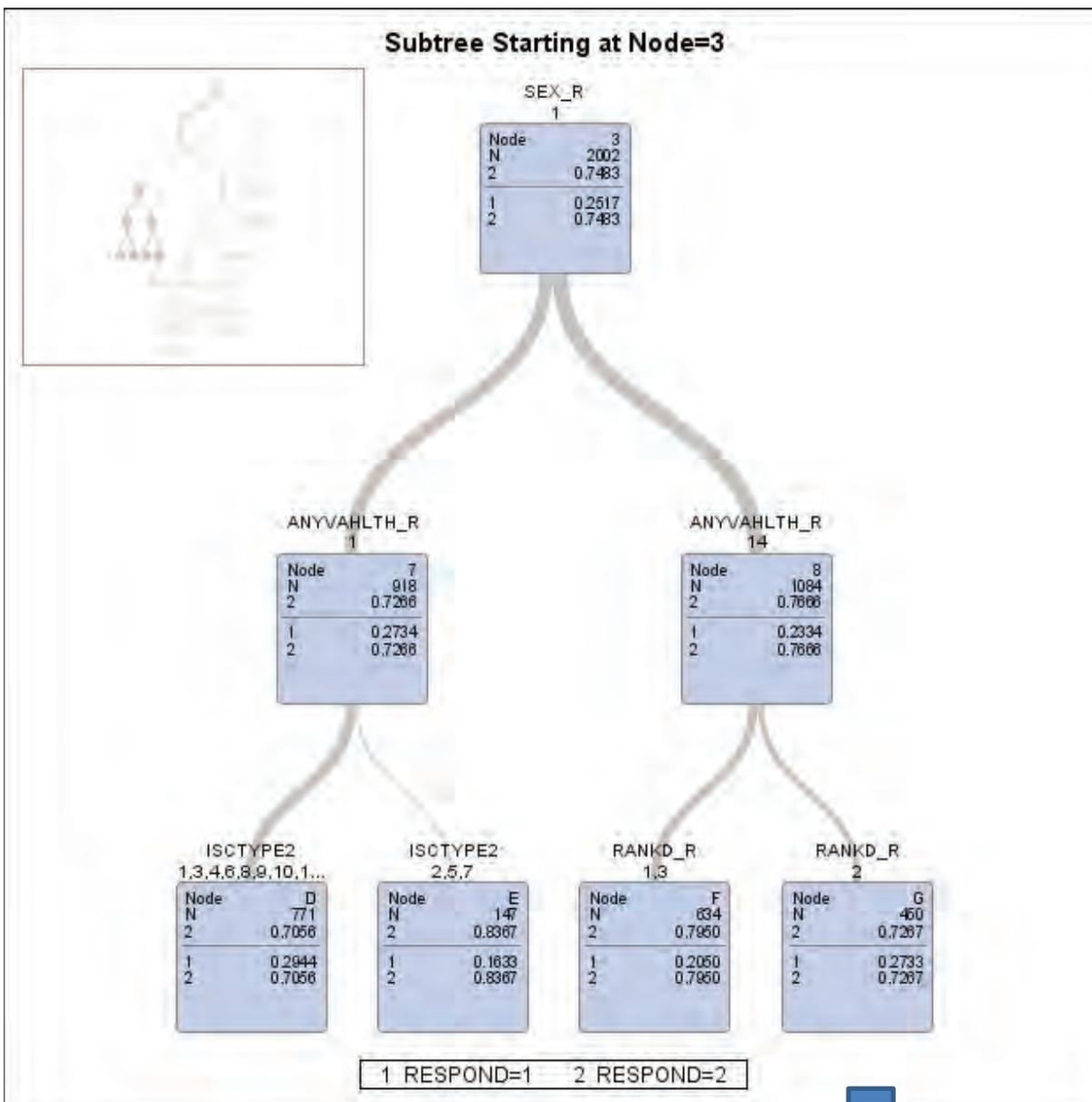
TABLE A-14 Comparison of Estimated Bias of Weighted Means Computed with Overall Base Weights Versus Final Weights for Selected Continuous Variables* (standard errors are shown in parentheses)

Variable	Description	Weighted Proportion (%)				2nd-Phase Sample				P Values	
		2nd-Phase Sample		1st-Phase Sample		Est. Bias (%)		Ratio		Base Weights	Final Weights
		Base Weights	Final Weights	Base Weights	Final Weights	Base Weights	Final Weights	Base-to-Final	Final		
OPALL_CNT24	The number of mental health outpatient encounters with a mental health diagnosis code in the last 24 months	2.48	1.76	1.86	0.62 (0.20)	-0.09 (0.14)	7.8	0.002	0.002	0.52	
OPALL_CNT_SEP	The number of mental health outpatient encounters with a mental health diagnosis code since separation	6.33	4.38	4.79	1.54 (0.45)	-0.41 (0.28)	3.8	<0.001	<0.001	0.14	
OPMH_CNT24	The number of mental health outpatient encounters with a mental health stop code in the last 24 months	3.07	2.21	2.42	0.65 (0.23)	-0.21 (0.16)	3.1	0.004	0.004	0.19	
OPMH_CNT_SEP	The number of mental health outpatient encounters with a mental health stop code since separation	7.89	5.51	6.18	1.71 (0.51)	-0.67 (0.32)	2.6	<0.001	<0.001	0.03	

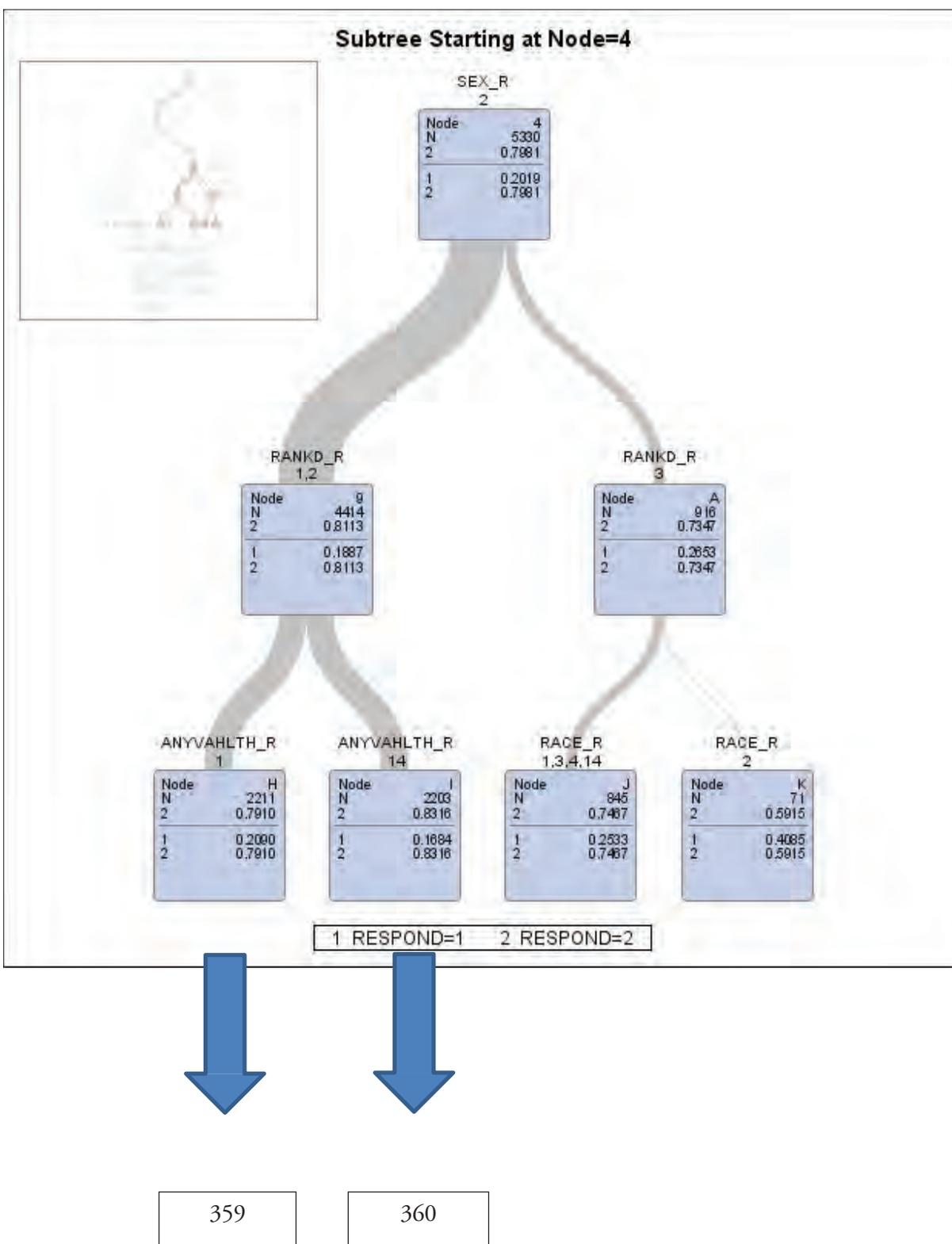
* Italics indicates revision to text of an earlier version of this document.

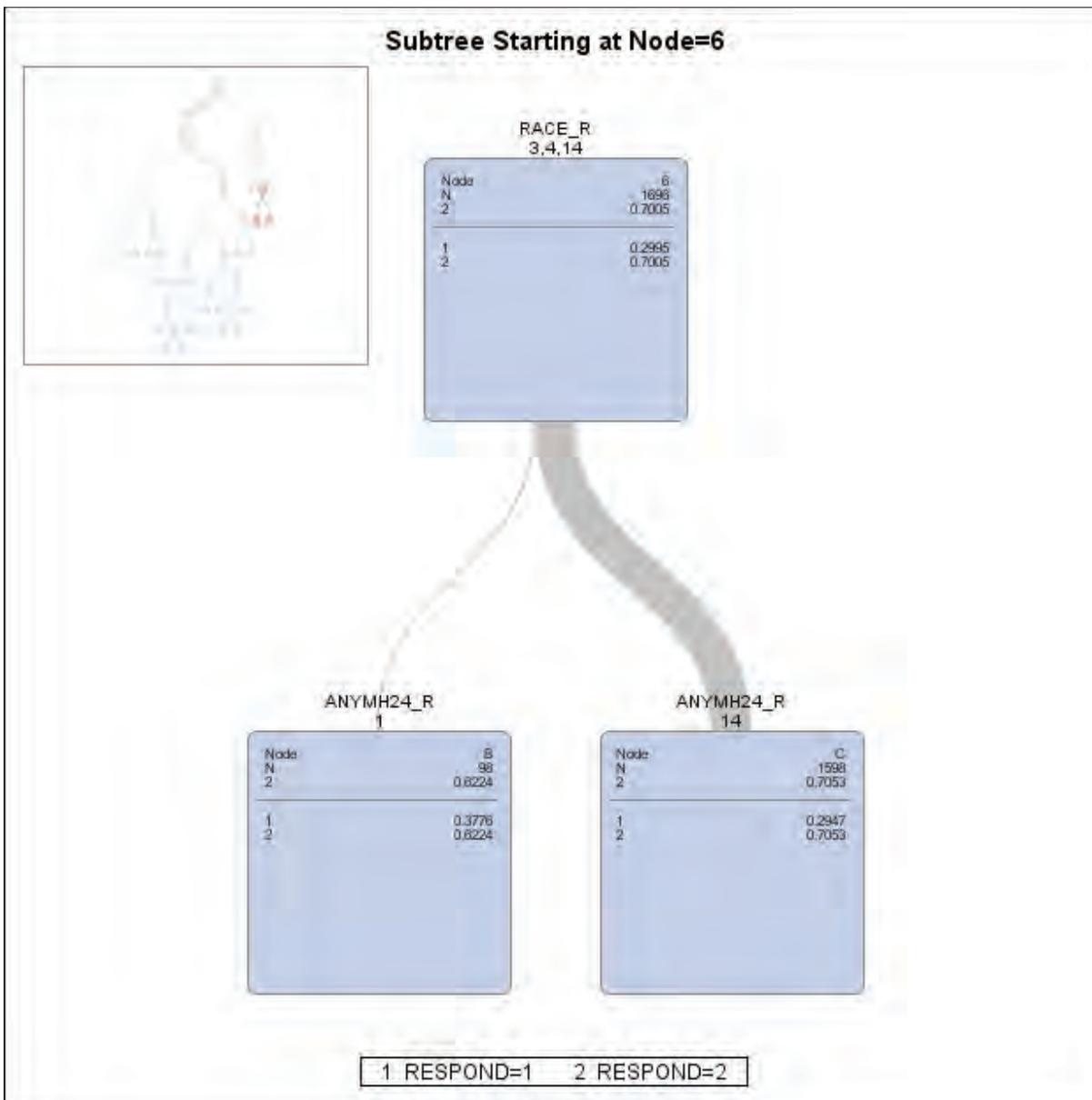
CHAID Tree for Responding Deployed Veterans. A node's proportion for Category 1 indicates the node's response rate.

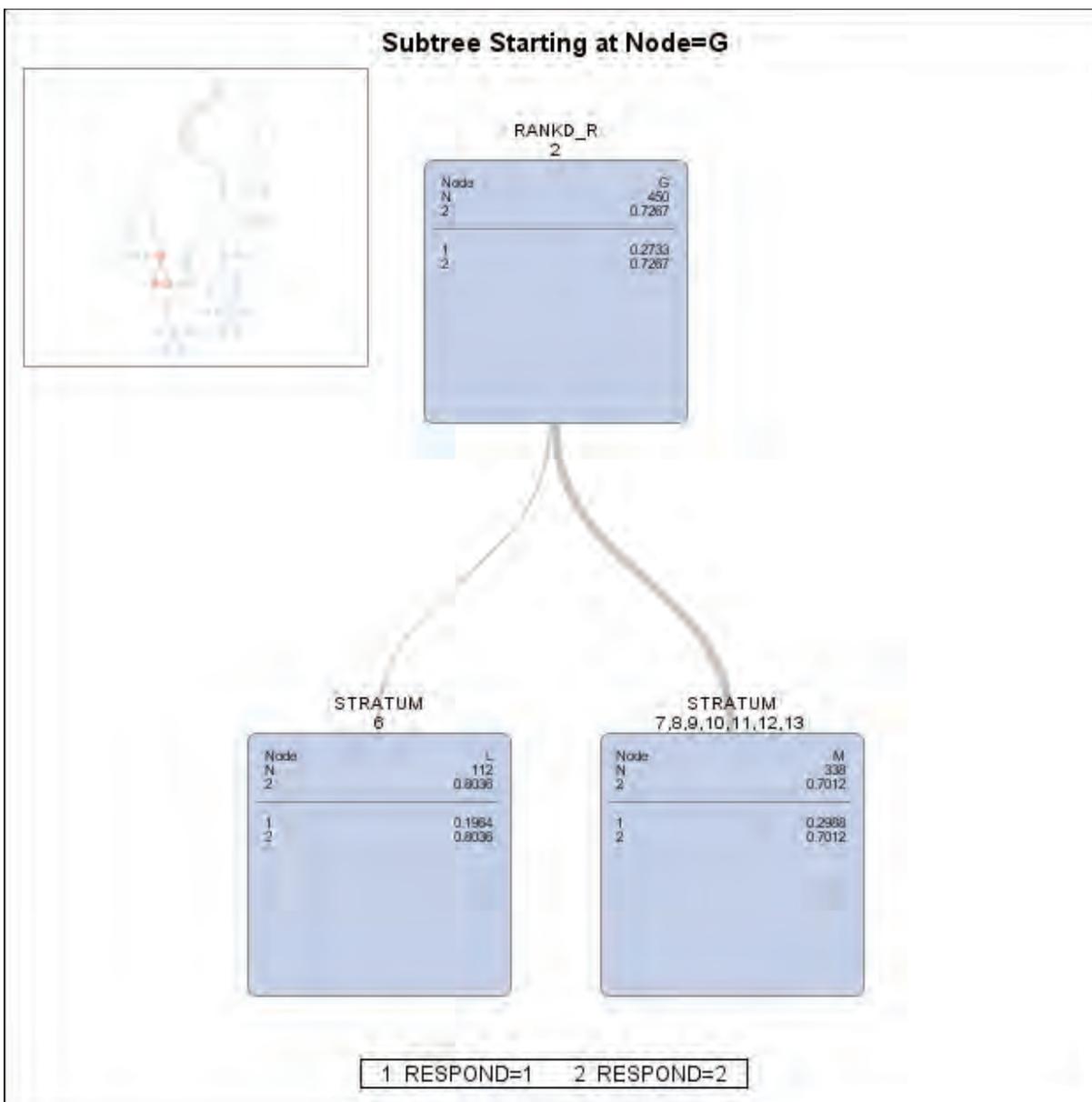


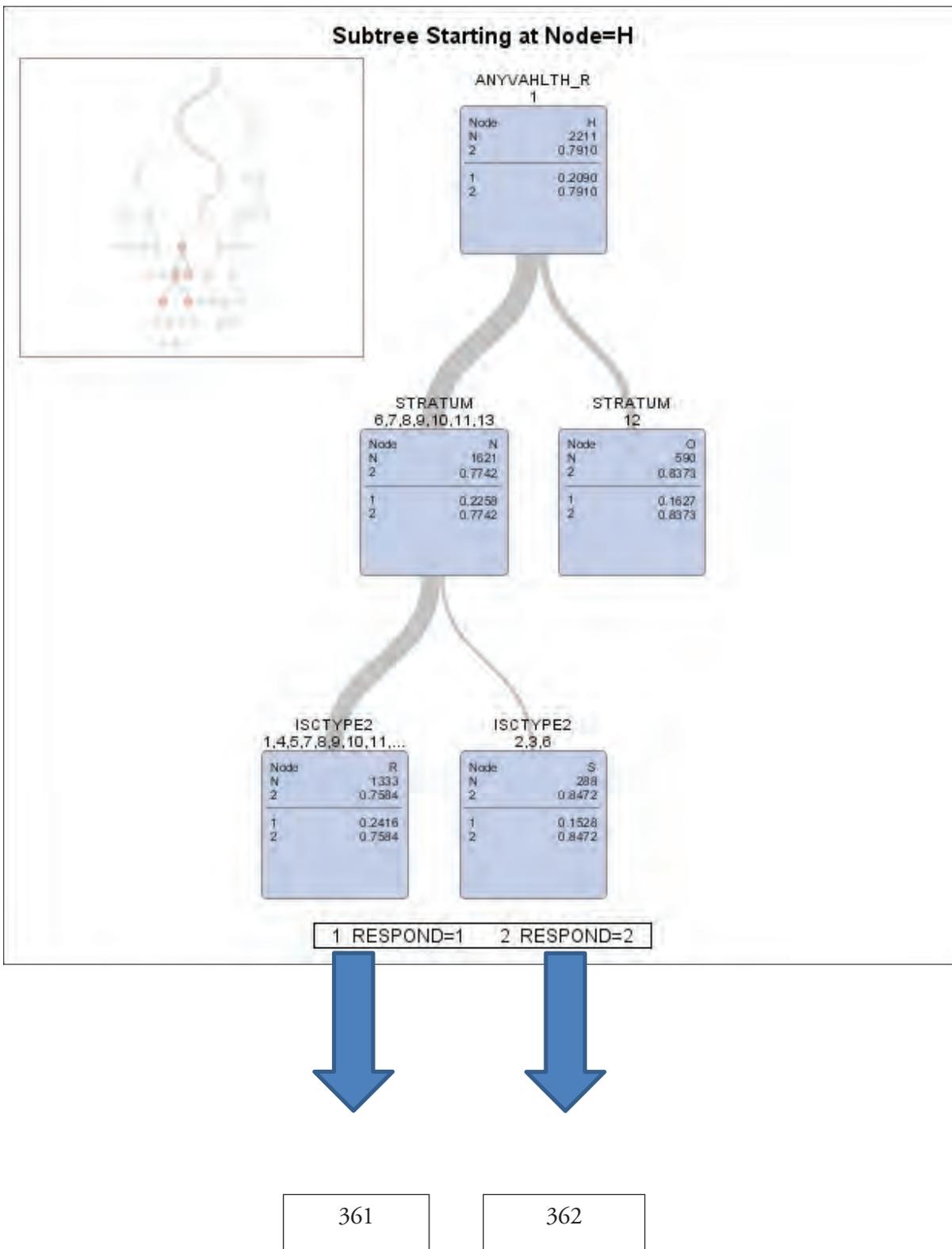


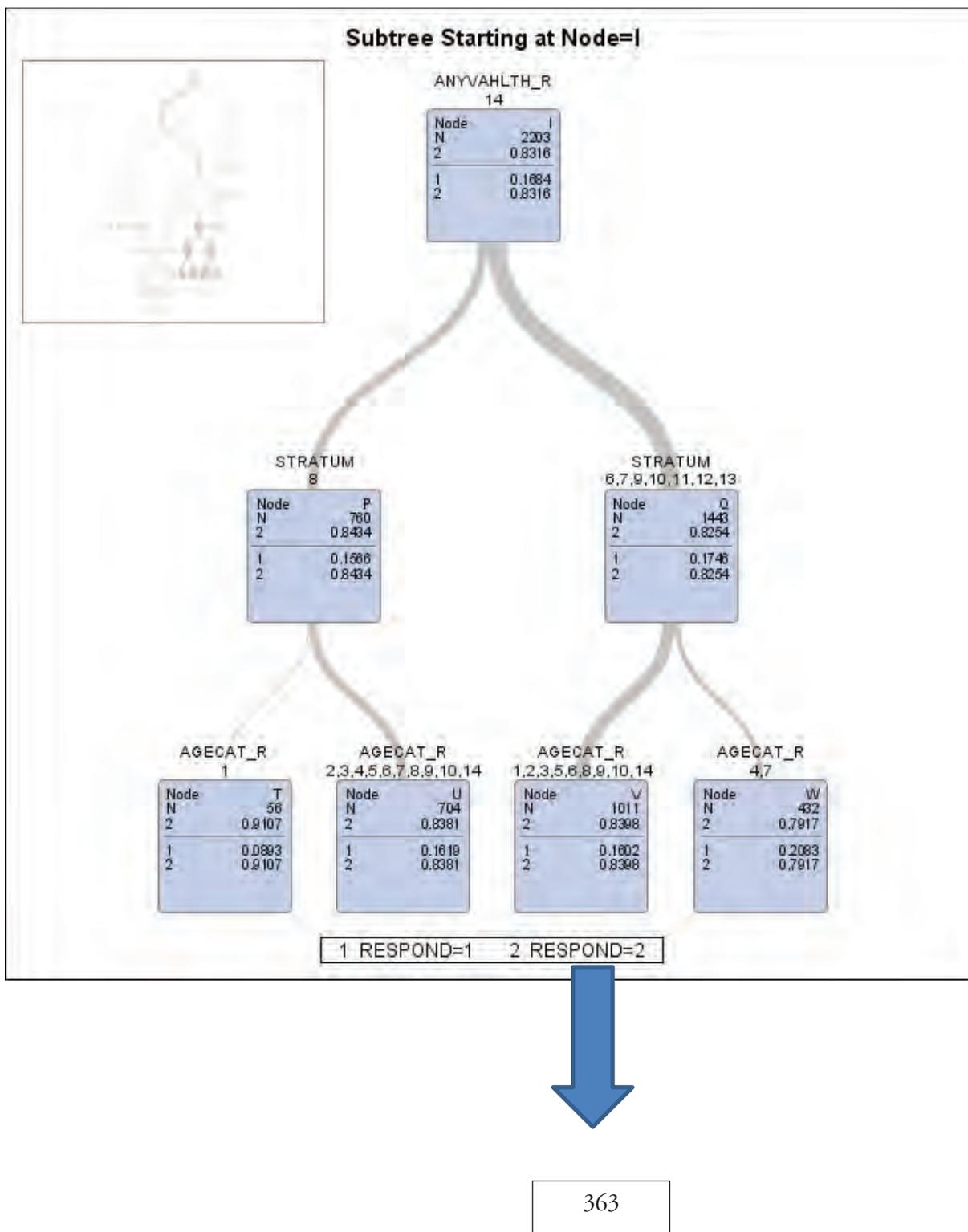
358

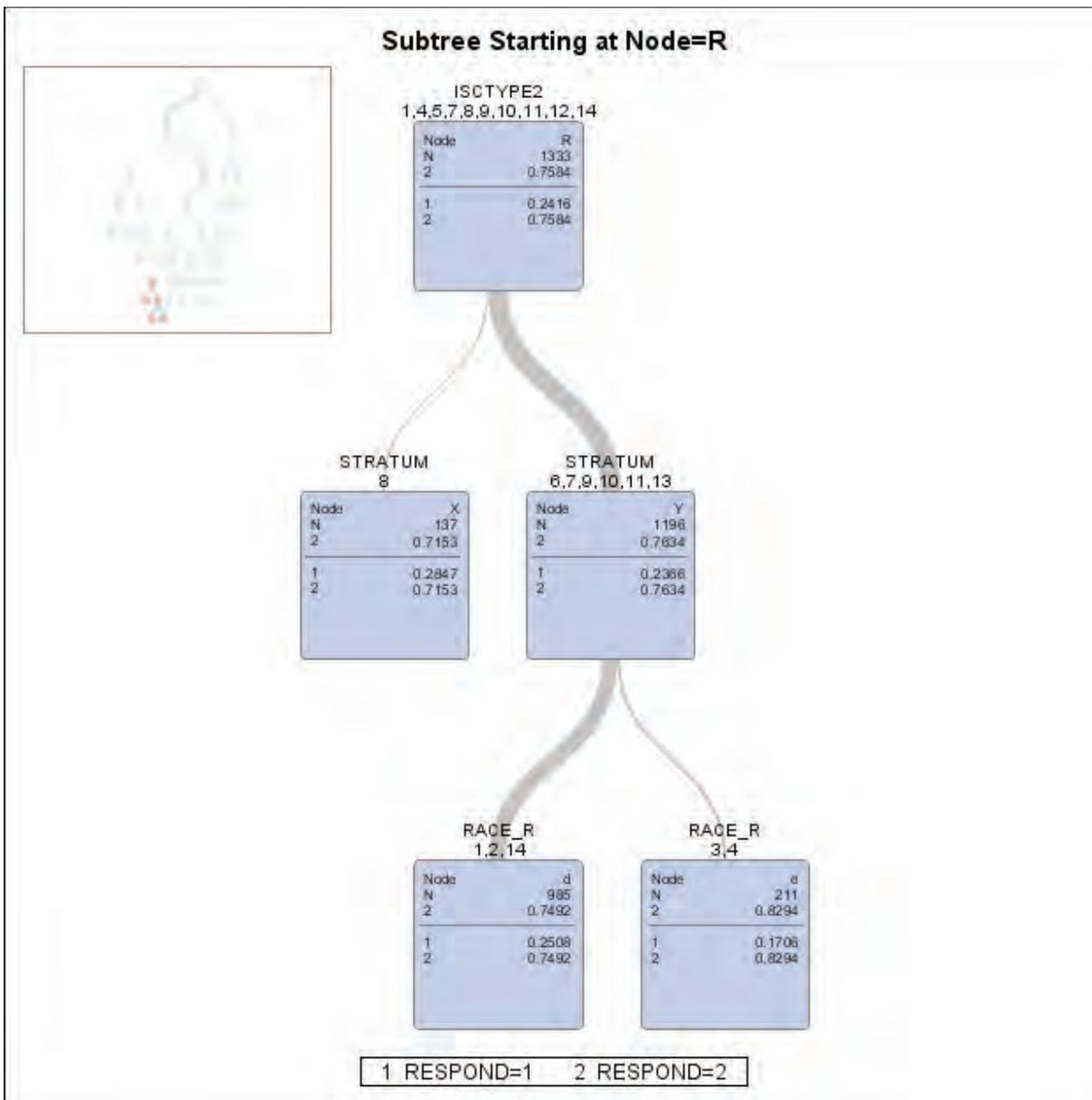


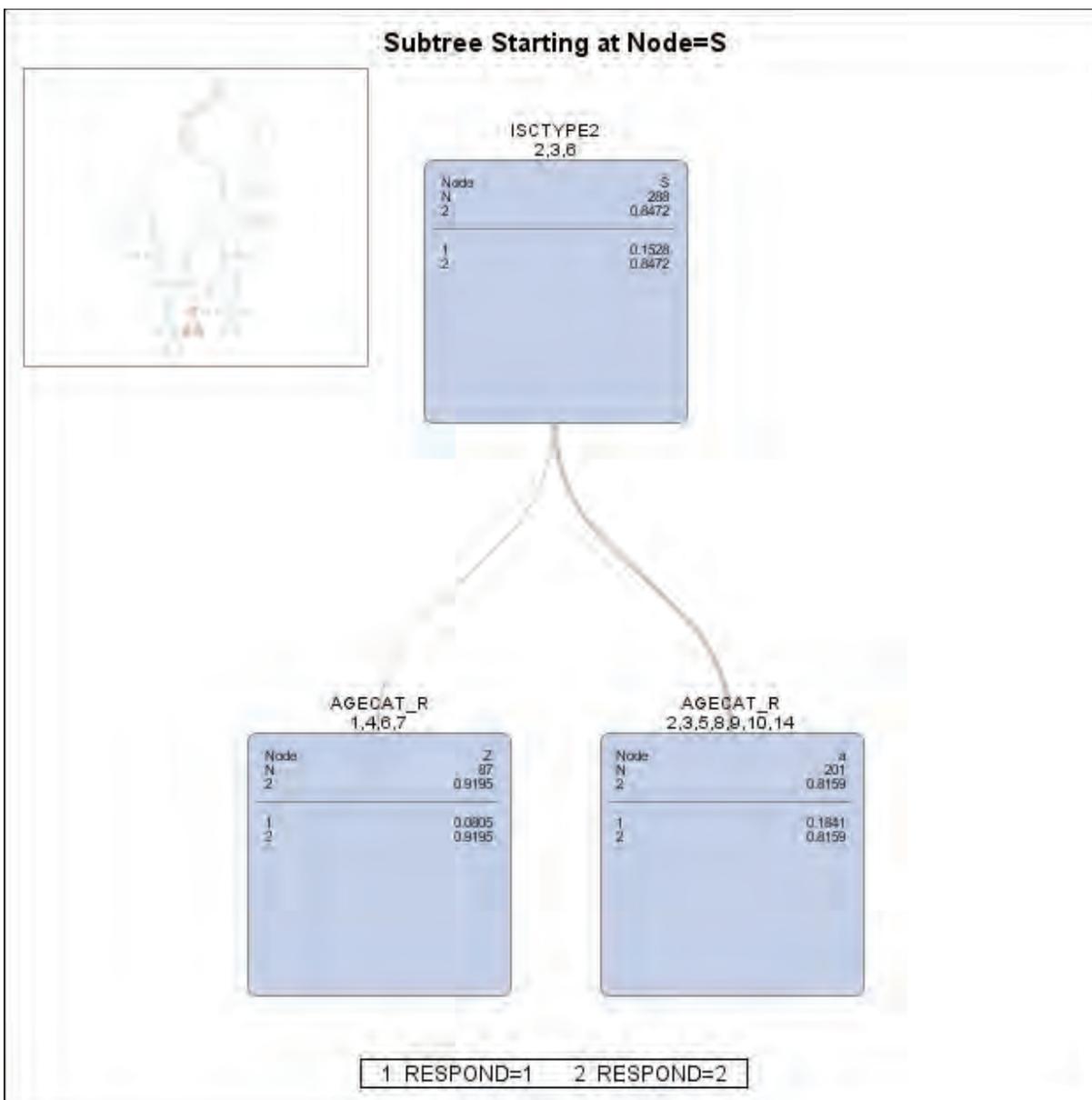


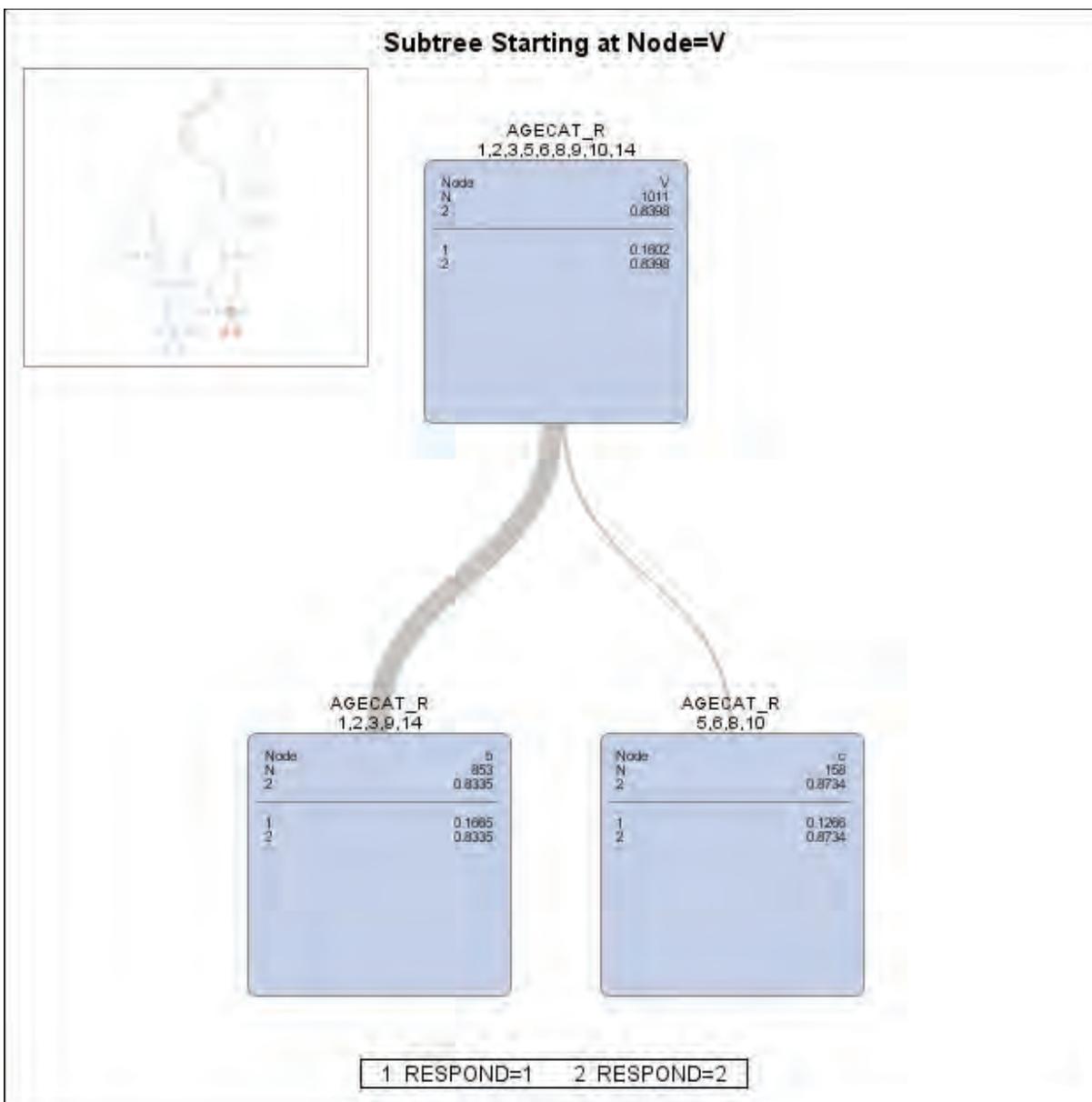




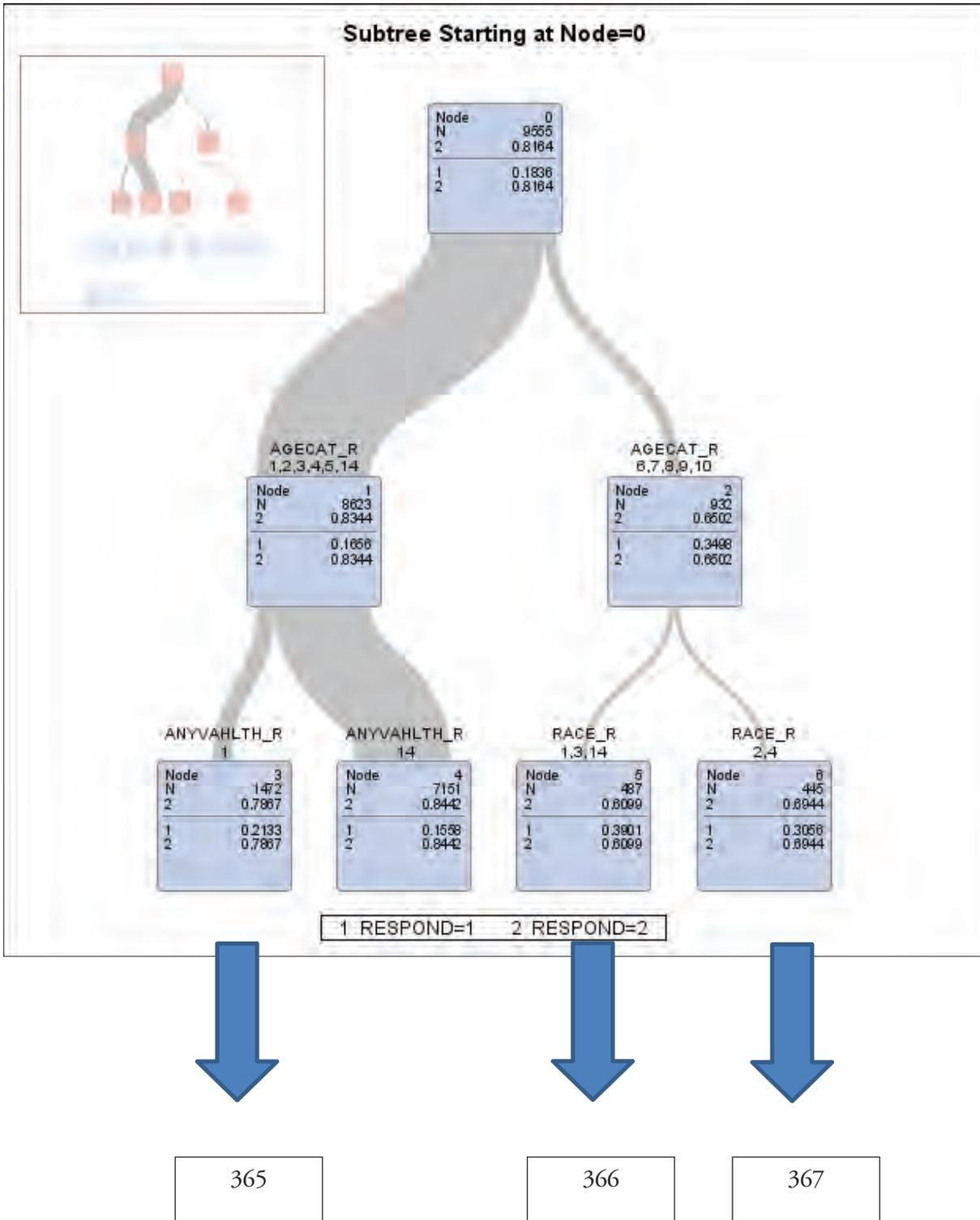


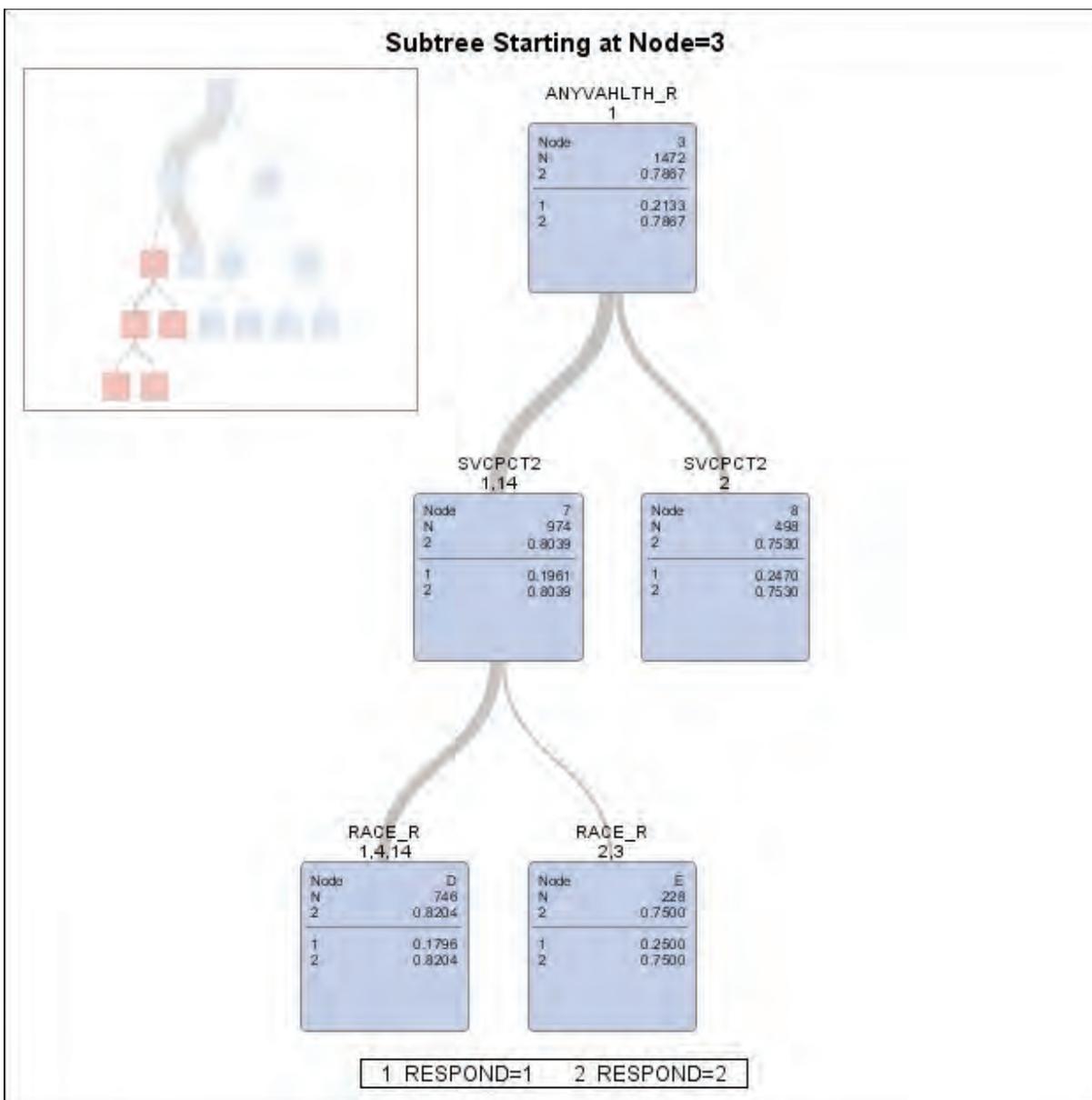


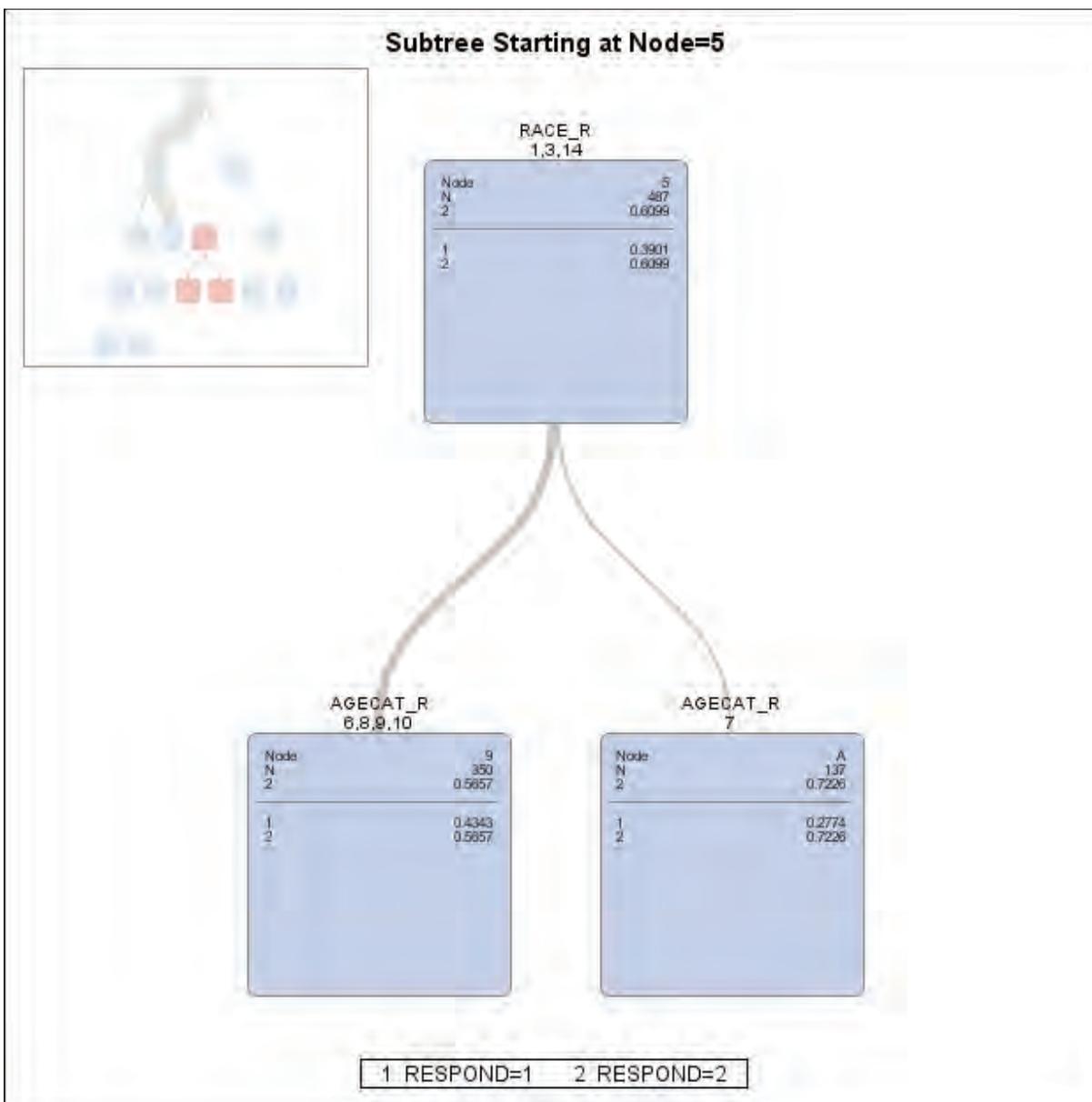


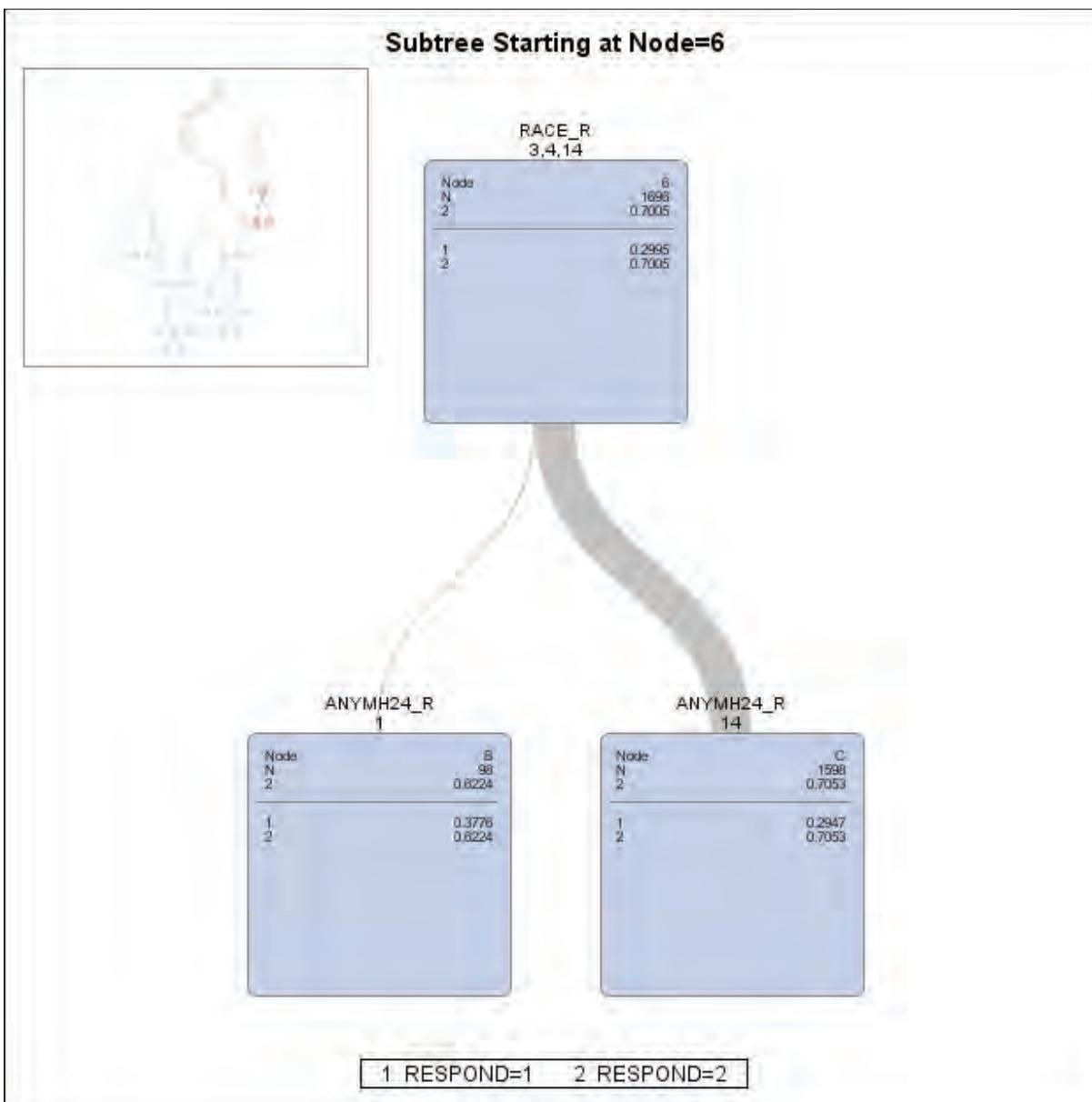


CHAID tree for Responding Non-Deployed Veterans. A node's proportion for Category 1 indicates the node's response rate.









NON-RESPONSE BIAS ANALYSIS AND CALCULATION OF WEIGHTS

Calculation of Base Weights for Sampled Veterans in First-Phase Sample

Westat received a first-phase sample from the VA and then selected from the first-phase sample a stratified second-phase sample. The first-phase sample consisted of two data files. One file, containing 470,606 records, contained information for a sample of OEF/OIF/OND veterans who had been deployed to Iraq or Afghanistan and according to VA records were alive on October 1, 2015. The data source for this file was the OEF/OIF/OND roster file, which Dr. Rani Hoff of the VA described as follows¹⁰:

The OEF/OIF/OND Registry consists of all service members who served or are serving in the OEF/OIF/ON era and have enrolled with VA. Enrollment means that they have applied and been considered to be eligible for VA services; it does not mean that those individuals have received VA care. In addition, service members under certain circumstances (e.g., Reserve and National Guard member) can be eligible for VA services prior to the formal discharge from military services.

On March 15, 2016, the VA provided Westat and IOM/NAS a tabulation of the OEF/OIF/OND roster file from which the first-phase sample of deployed veterans ($n' = 470,606$) had been selected. This tabulation indicated that the OEF/OIF/OND registry contained $N = 1,400,569$ veterans. Hence, the first-phase-sample base weight for deployed veterans is equal to $N/n' = 1,400,569/470,606 = 2.9761$. In other words, the first-phase sample of deployed veterans was approximately a 1-in-3 sample.

The second file the VA provided to Westat, containing 724,738 records, was a first-phase sample of OEF/OIF/OND veterans who had not been deployed to Iraq or Afghanistan. The VA selected this sample from multiple administrative data sources, with a veteran's demographic variables being included on the file provided only if the veterans appeared in VA medical records. The VA did not provide Westat with any counts of the number of veterans present in the administrative data sources used to select the sample of non-deployed veterans nor the vintages of the administrative data sources. The VA selected the first-phase sample of non-deployed veterans in early 2016.

We had asked the VA to select a 1-in-4 sample of both deployed and non-deployed veterans. However, as noted above, the first-phase sample of deployed veterans was approximately a 1-in-3 sample. We therefore carried out a check on the sampling fraction used for the first-phase sample of non-deployed veterans. This check was based on the VetPop2014 Model predictions produced by the VA's Office of the Actuary, predictions that are based on ACS estimates and DoD administrative data. Table 2L from the VetPop2014 Model contains the predictions for September 30, 2015, and September 30, 2016, shown below:

Description	Projected Living Veterans, 9/30/2015	Projected Living Veterans, 9/30/2016
Gulf War (Pre 9/11) and Gulf War (Post 9/11) only)	1,315,019	1,358,341
Gulf War (Post 9/11) only	2,794,947	2,985,802
Total	4,109,966	4,343,902*

*Due to rounding, the individual projections do not sum to the total.

Note that September 30, 2015, differs by only 1 day from the date of the data used to select the sample of deployed veterans from the OEF/OIF/OND register file containing 1,400,569 records. Hence, an estimate of the number of non-deployed OEF/OIF/OND veterans on September 30, 2015 can be obtained by subtraction, and then an estimate of the number of non-deployed OEF/OIF/OND veterans

¹⁰Email from Rani Hoff of the VA to Laura Aiuppa of the National Academies, May 6, 2016.

on September 30, 2016 can be obtained by multiplying the 2015 estimate by the 2016-to-2015 ratio for all OEF/OIF/OND veterans. Along with the estimate obtained by multiplying the size of the non-deployed sample by 4, below are the estimates of the number of non-deployed OEF/OIF/OND veterans in the administrative data sources from which the VA selected the sample of non-deployed veterans:

N based on	Calculation of N	Estimated N	Base Weight
9/30/2015 projection	$N = 4,109,956 - 1,400,569$	2,709,387	3.7384
9/30/2016 projection	$N = 2,709,387 \times 4,343,902 / 4,109,956$	2,863,610	3.9512
Assumed 1 in 4 sample	$N = 4 \times 724,738$	2,898,952	4.0000

The base weights in this table are very similar. Given the likely inaccuracies in the two projections, we prefer not to use either of them for developing the first-phase weights. Our conclusion from this analysis is that the sample of non-deployed OEF/OIF/OND veterans was a 1-in-4 sample, and a first-phase sample base weight of 4.0 should be used for this sample. Because of the large size of the sample of non-deployed OEF/OIF/OND veterans ($n' = 724,738$), we believe that the best estimate of N for non-deployed OEF/OIF/OND veterans is obtained by multiplying the first-phase sample size by 4.

Calculation of Overall Base Weights for Sampled Veterans in the Second-Phase Sample

Westat combined the two VA-provided data files to create a sampling frame for the selection of a stratified second-phase sample. The stratification variables for the second-phase sample were deployment status (2 levels: yes or no), the usage of VA mental health services (2 levels: yes or no), sex (3 levels: male, female, missing), and age category (3 levels: <30, 30+, and missing). For the purposes of increasing the precision of subpopulation estimates, female veterans, deployed veterans, and veterans who use VA mental health services were oversampled. Also, veterans younger than 30 were over-sampled due to their expected lower response rates compared to older veterans.

Table A-15 describes the second-phase sampling strata and the size of the first- and second-phase samples associated with these strata, denoted n'_h and n_h , respectively. The computed overall base weight for a veteran selected for the second phase was equal to the appropriate first-phase-sample base weight times the ratio n'_h/n_h .

TABLE A-15 Second-Phase-Sampling Sample Design

Deployed?	Use of VA MH Services	Sex	Age Category	Stratum	Sample Size		
					1st Phase	2nd Phase	
No	No	Missing	Missing	1	645,389	7,855	
				2	3,590	145	
	Yes	Female	30+	3	16,872	510	
			<30	4	8,612	195	
			30+	5	50,275	850	
Yes	No	Female	<30	6	6,183	410	
			30+	7	31,046	1,535	
		Male	<30	8	47,569	970	
			30+	9	244,032	3,725	
	Yes	Female	<30	10	3,385	165	
			30+	11	14,935	545	
			Male	<30	12	23,896	605
				30+	13	99,560	1,890
				Total		19,400	

TABLE A-16 Breakdown of Second-Phase Category by Survey Outcome

Aggregated Outcomes		Detailed Outcomes	
Description	# Cases	Description	# Cases
Respondents	4,271	Eligible completed cases	4,180
		Known ineligible:	91
		<i>Deceased</i>	38
		<i>Not a Veteran / Never in service</i>	15
		<i>Separated/retired before 1/1/2002 Still on active duty</i>	22
Non-respondents	15,129	Responded declining to participate (refusal)	17
Total	19,400	Failed to respond	15,112

Calculation of Non-Response Adjustment Factors

Table A-16 contains a breakdown of the 19,400 veterans who were selected for the second-phase sample and invited to participate in the survey.

For weighting purposes, the population of inference is defined to be the population at the time of sampling, so that the known ineligible cases are classified as “respondents.” This definition facilitates the use of population controls for that population. All “respondents” will thus be assigned weights for the analysis, but analysts can simply subset their analyses to eligible completed cases.

The dependent variable for the CHAID analysis was the base-weighted proportion of “respondents” in the second-phase sample. (A separate document updates an earlier memo we wrote about the CHAID analysis.) Weighting cells were created by using the scoring code produced by the CHAID analysis to assign each of the 19,400 sampled veterans to one of 29 leaves of the CHAID tree. Cells were combined when necessary to achieve a minimum cell size of 29 “respondents.”¹¹ In particular, two weighting cells were combined if one or both of the cells had fewer than 29 ‘respondents’ and both cells had the same parent node in the CHAID tree. This reduced the number of weighting cells to 24.

After the weighting cells were formed, a non-response adjustment factor was computed for each cell as the combination of (1) the inverse of the response rate in the cell and (2) an adjustment factor to align the sum of the adjusted overall weights of “respondents” to the second-phase sample to the sum of the first-phase sample weights of veterans selected for the first-phase sample. This operation was conducted in a single step. To compute the needed sums of first-phase sample weights by cell, we used the scoring code from the CHAID analysis to assign each of the 1,195,344 veterans in the first-phase-sample file to a weighting cell and then summed to the cell level the associated first-phase-sample base weights. The following formula was used to compute the adjustment factor for each weighting cell:

$$f_c^{2,nr} = \frac{\sum_{j \in c} w_j^{(1)}}{\sum_{i \in ER_c} w_i + \sum_{i \in I_c} w_i}$$

¹¹ Sampled cases—that is, both respondents and non-respondents—were used to create the CHAID tree, which had a minimum of 50 sampled cases per leaf. Some of the leaves contained fewer than 29 “respondents,” however, and to form weighting cells these leaves were combined with another leaf having the same parent in the CHAID tree.

where $\sum_{j \in c} w_j^{(1)}$ is the sum of the first-phase-sample weights for all first-phase sampled veterans in weighting cell c , $\sum_{i \in ER_c} w_i$ is the sum of overall base weights for eligible respondents in weighting cell c , and $\sum_{i \in I_c} w_i$ is the sum of overall base weights for veterans know ineligible in weighting cell c .

The magnitudes of the adjustment factor ranged from 2.32 to 6.19. The adjusted weights were calculated by multiplying the overall base weights of the “respondents” by the adjustment factor and by setting the adjusted weight of the non-respondents to zero.

Raking to Population Totals

To the raking cells for deployed veterans associated with the four interior cells of Table A-17, we added a fifth raking cell for non-deployed veterans, which contained the control total 2,898,952, obtained by multiplying the size of the first-phase sample for non-deployed veterans by 4. For this raking step, the sample file was subset to include only “respondents,” with each “respondent” assigned to a raking cell based on the values of sex, deployment status, and the usage of VA mental health services during the past 24 months present on the VA-provided administrative data for the first-phase sample. Because there was only a single raking dimension, consisting of five cells, the raking factor associated with a raking cell was the cell’s control total divided by the sum of the adjusted overall base weights for the cell. The raking factors ranged from 0.91752 to 1.12489. The final raked weight for a “respondent” was its adjusted base weight multiplied by the raking factor for the raking cell to which it had been assigned.

The precision of survey estimates is improved if known information about the total population is used during the weighting process. We used a raking method to incorporate into the weights population-level totals shown in the following VA-provided tabulation of the OEF/OIF/OND registry:

The following are unweighted quantiles for the raked weights:

100% max	2035.7
99%	2035.7
95%	2035.7
90%	2035.7
75% Q3	2035.7
50% median	725.2
25% Q1	415.0
10%	238.3
5%	200.4
1%	149.5
05 Min	97.7

TABLE A-17 VA-Provided Tabulation of Deployed Veterans

		Female	Male*	Total
Use VA mental health services in last 24 months	No	95,733	729,884	825,617
	Yes	74,818	500,134	574,952
Total		170,551	1,230,018	1,400,569

*Includes unknown/missing.

A rule we use for determining whether large weights should be trimmed is to trim those weights that exceed 3.5 times the median weight. Because the largest weight was only $2035.7/725.2 = 2.8$ times the median weight, we decided not to trim any of the weights. The largest weights were for “respondents” in sampling stratum 1, which contains non-deployed veterans who had not used VA mental health services in the past 24 months. The smallest weights were for “respondents” in sampling strata 6 and 7, which contain deployed female veterans who had also not used VA mental health services in the past 24 months.

Design Effects

Though over-sampling increases the precision of some subpopulation estimates, it can produce a loss in precision for population-level estimates. A measure of this loss in precision due to over-sampling is the *design effect*, which is the ratio of the stratified-sample variance to the variance of an unstratified sample of the same size. An approximation for the design effect, denoted *deff*, of an estimated mean is the following:

$$deff = \sqrt{1 + c^2}$$

where *c* is the coefficient of variation of the weights of the eligible completed cases used to compute the mean. Table A-18 contains the values of *c* and *deff* for the intermediate and final versions of calculated weights.

Variance Estimation

We also calculated replicate weights, using the JK_n method. Each of the 13 sampling strata was a variance stratum, each of which in turn contained 15 variance units, yielding 195 replicate samples.¹² Our adjustment of the overall base weights to totals of first-phase-sample base weights and also the raking of the adjusted weights for deployed veterans to population totals can reduce the sampling variability of estimates computed from data correlated with the variables used to compute these totals. The use of the replicate weights to estimate standard errors captures this reduction in sampling variability, whereas the use of Taylor linearization to estimate standard errors does not.

Table A-19 compares standard errors computed using replicate weights with those computed using Taylor linearization for some weighted proportions computed from the administrative data for the second-phase sample’s eligible completed cases. Table A-20 is similar to Table A-19, except that it is for weighted means computed from selected continuous administrative-data variables.

TABLE A-18 Coefficients of Variation of the Weights for Eligible Completed Cases

Type of Sample Weight	<i>c</i>	<i>deff</i>
First-phase-sample base weights	0.1471	1.02
Overall weights		
Base weights	0.4433	1.20
Adjusted base weights	0.6870	1.47
Raked weights	0.6901	1.48

¹²To create the 15 variance units within each sampling stratum, we sorted the second-phase sample by the same variables that the first-phase sample had been sorted by when selecting the second-phase sample. The second-phase-sample cases were then assigned systematically to the 15 variance units associated with each sampling stratum. Second-phase-sample case number 1 was assigned to Variance Unit 1, sample case number 2 was assigned to Variance Unit 2, . . . , sample case number 15 was assigned to Variance Unit 15, sample case number 16 was assigned to Variance Unit 1, etc.

TABLE A-19 Comparison of Calculated Standard Errors for Selected Categorical Variables

Variable	Description	Weighted Proportion (%)	Estimated Standard Error (%)	
			Replication	Taylor
ANYMH24_R	Use VA mental health services	16.3	0.30	0.53
	Do not use VA mental health services or missing	83.7	0.30	0.53
ANYVAHLTH_R	Use VA health services	26.4	0.10	0.70
	Do not use VA health services or missing	73.6	0.10	0.70
RACE_R	White	16.1	0.34	0.55
	Black	4.8	0.22	0.28
	Asian	0.9	0.13	0.13
	Other	4.6	0.26	0.32
	Missing	73.6	0.10	0.70
UNITCODE_R	Active	19.3	0.37	0.59
	Reserve	12.9	0.37	0.47
	Missing	67.8	0.00	0.76
RANKD_R, pay grade	E1-E3	9.8	0.25	0.44
	E4	9.1	0.25	0.42
	E5	4.4	0.07	0.26
	Other enlisted	5.2	0.10	0.26
	Warrant officers	0.3	0.05	0.06
	Commissioned officers	3.4	0.10	0.21
	Missing	67.8	0.00	0.76

TABLE A-20 Comparison of Calculated Standard Errors for Selected Continuous Variables

Variable	Description	Weighted Proportion (%)	Estimated Standard Error (%)	
			Replication	Taylor
OPALL_CNT24	The number of mental health outpatient encounters with a mental health diagnosis code in the last 24 months	1.76	0.14	0.16
OPALL_CNT_SEP	The number of mental health outpatient encounters with a mental health diagnosis code since separation	4.38	0.28	0.33
OPMH_CNT24	The number of mental health outpatient encounters with a mental health stop code in the last 24 months	2.21	0.16	0.18
OPMH_CNT_SEP	The number of mental health outpatient encounters with a mental health stop code since separation	5.51	0.32	0.39

**SURVEY ITEM SOURCES FOR THE OEF/OIF/OND VETERANS' ACCESS TO
HEALTH SERVICES SURVEY**

Item	Source
	References appear at the end of the table
Q1. In what component(s) have you served? Select all that apply Active Duty Reserve National Guard	National Health Study for a New Generation of U.S. Veterans ¹
Q2. In what branch(es) did you serve? Select all that apply Army Marine Corps Navy Air Force Coast Guard	National Health Study for a New Generation of U.S. Veterans ¹
Q3. What was the highest rank and pay grade you held while in the military? E1–E4 E5–E6 E7–E9 W1–W5 O1–O3 O4–O6 O7–O10	National Vietnam Veteran Readjustment Study, ² MODIFIED
Q4. Do you have a VA service-connected disability rating? Yes No	2010 National Survey of Veterans ³
Q5. What is your VA service-connected disability rating? 0 percent 10 to 20 percent 30 to 40 percent 50 to 60 percent 70 percent or higher Don't know	2010 National Survey of Veterans ³
Q6. Since September 11, 2001, how many months were you away in total for all deployments in support of OEF/OIF/OND? Include deployments to a combat area, noncombat area, or training mission. 1–6 months 7–12 months 13–24 months 25–36 months 37–48 months More than 48 months I have not been deployed in support of OEF/OIF/OND since September 11, 2001	New development

Item	Source
<p>Q7. How many of your deployments in support of OEF/OIF/OND were to the following combat areas? Mark zero if no deployments to these areas.</p> <p>Zero, 1, 2, 3, 4, 5, 6 to 9, 10 or more</p> <p>a. Iraq b. Afghanistan c. Other combat area</p>	2014 Wounded Warrior Project Annual Alumni Survey ⁴
<p>Q8. The statements below are about your experiences. Please indicate if you experienced the following events during your deployments in support of OEF/OIF/OND since September 11, 2001 by selecting the response that best fits your answer. The statements below are about your experiences. Please indicate if you experienced the following events during your deployments in support of OEF/OIF/OND since September 11, 2001 by selecting the response that best fits your answer.</p> <p>Never, Once or twice, Several times over entire employment, A few times each month, A few times each week, Daily or almost daily</p> <p>a. I saw the bodies of dead enemy combatants. b. I encountered land or water mines, booby traps, or roadside bombs (for example, IEDs). c. I saw refugees who had lost their homes or belongings. d. I fired my weapon at enemy combatants. e. I saw civilians after they had been severely wounded or disfigured. f. I was involved in searching and/or disarming potential enemy combatants. g. I went on combat patrols or missions. h. I personally witnessed someone from my unit or an ally unit being seriously wounded or killed. i. I was exposed to hostile incoming fire.</p>	DRRI, subset Aftermath and Combat Experience scales ⁵ (subset based on guidance from Richard Kulka and Dawne Vogt)
<p>Q9. What is your date of birth?</p> <p>MM/DD/YYYY</p>	VA Health ViEWS ⁶
<p>Q10. Are you male or female?</p> <p>Male Female</p>	NHANES ⁷
<p>Q11. Are you of Hispanic, Latino, or Spanish origin? Select all that apply</p> <p>No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican American, or Chicano Yes, Puerto Rican Yes, Cuban Yes, another Hispanic, Latino, or Spanish origin — Specify origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.</p>	2014 American Community Survey ⁸

Item	Source
<p>Q12. What is your race? Select all that apply</p> <p>White</p> <p>Black or African American</p> <p>American Indian or Alaska Native — Specify name of enrolled or principal tribe _____ </p> <p>Asian Indian</p> <p>Chinese</p> <p>Filipino</p> <p>Japanese</p> <p>Korean</p> <p>Vietnamese</p> <p>Other Asian — Specify race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on _____ </p> <p>Native Hawaiian</p> <p>Guamanian or Chamorro</p> <p>Samoan</p> <p>Other Pacific Islander — Specify race, for example, Fijian, Tongan, and so on. _____ </p> <p>Some other race —Specify race _____ </p>	2014 American Community Survey ⁸
<p>Q13. What is the highest degree or level of school you have completed?</p> <p>Less than high school GED</p> <p>High school diploma</p> <p>Some college credit, but less than 1 year of college credit</p> <p>1 or more years of college credit, no degree</p> <p>Associate's degree (for example, AA, AS)</p> <p>Bachelor's degree (for example, BA, BS)</p> <p>Master's degree (for example, MA, MS, MEng, MEd, MSW, MBA)</p> <p>Professional degree beyond a bachelor's degree (for example, MD, DDS, DVM, LLB, JD)</p> <p>Doctorate degree (for example, PhD, EdD)</p>	2010 National Survey of Veterans ³
<p>Q14. During the last week, were you . . .</p> <p>Working, or on paid vacation or sick leave from work</p> <p>Not working, but looking for work</p> <p>Not working and not looking for work</p>	2010 National Survey of Veterans ³
<p>Q15. What is the main reason you were not looking for work?</p> <p>You are retired</p> <p>You are disabled</p> <p>You were unable to work because of other health-related reasons</p> <p>You stopped looking for work because you could not find work</p> <p>You were temporarily laid off from work</p> <p>You were taking care of your home and family</p> <p>You were going to school</p>	2010 National Survey of Veterans, ³ MODIFIED (to include health-related option)

Item	Source
Q16. What is your current marital status? Now Married Widowed Divorced Separated Never Married Civil Commitment or Union	2010 National Survey of Veterans ³
Q17. How many people, including yourself, live in your household? 	National Survey of Women Veterans ⁹
Q18. Which income range category represents the total combined income of all members of this household during the past 12 months? Less than \$10,000 \$10,000 to \$24,999 \$25,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 to \$149,999 \$150,000 or more	2010 National Survey of Veterans, ³ MODIFIED (collapsed response categories)
Q19. Are you CURRENTLY covered by any of the following types of health insurance or health coverage plans? Select all that apply No health insurance VA (including those who have ever used or enrolled for VA health care) Insurance through a current or former employer or union (of yours or another family member) Insurance purchased directly from an insurance company (by you or another family member) Insurance through HealthCare.gov or a state insurance marketplace or exchange Medicare, for people 65 and older, or people with certain disabilities Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability TRICARE, TRICARE for Life, or other military health care Indian Health Service Any other type of health insurance or health coverage plan [specify] _____	2014 American Community Survey, ⁸ MODIFIED (to include ACA option and also moved VA insurance up to first option)
Q20. In the past 24 months, have you used any of the following VA benefits or services? Select Yes or No for each item. a. Home loans b. Housing Assistance (HUD-VASH, etc.) c. Education and training (Post-9/11 GI Bill, etc.) d. Vocational rehabilitation and employment e. Disability compensation and pension f. Transition assistance	New development

Item	Source
<p>Q21. In the past 24 months, have you used any of the following physical health care services (any care other than mental health)?</p> <p>Yes, No, but I am or have been eligible in the past 24 months, No, and I have not been eligible in the past 24 months</p> <p>a. Health care at a VA facility</p> <p>b. Health care at a non-VA facility paid for by the VA</p>	New development
<p>Q22. In the past 24 months, have you used any of the following <u>mental or behavioral health care</u> services?</p> <p>Select Yes or No for each item</p> <p>a. Mental or behavioral health care through your VA Primary Care Provider</p> <p>b. Mental or behavioral health care through a VA mental health treatment facility</p> <p>c. Mental or behavioral health care through a Vet Center</p> <p>d. Mental or behavioral health care through a non-VA provider, paid for by the VA</p> <p>e. Any other mental or behavioral health care not paid for by the VA</p>	New development
<p>Q23. Have you used the VA for <u>any</u> mental or behavioral health services, either inpatient or outpatient, such as group therapy, psychotherapy, social skills training, or rehabilitation programs since [MONTH, YEAR]?</p> <p>Yes</p> <p>No</p>	New development
<p>Q24. Are you <u>currently</u> receiving mental health care through the VA?</p> <p>Yes</p> <p>No</p>	New development
<p>Q25. During the <u>past 4 weeks</u>, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?</p> <p>Yes, all of the time, Yes, most of the time, Yes, some of the time, Yes, a little of the time, No, none of the time</p> <p>a. Accomplished less than you would like.</p> <p>b. Didn't do work or other activities as carefully as usual.</p>	VR-12/36 ¹⁰
<p>Q26. During the past 30 days, about how often did you feel . . .</p> <p>All of the time, Most of the time, Some of the time, A little of the time, None of the time</p> <p>a. . . . nervous?</p> <p>b. . . . hopeless?</p> <p>c. . . . restless or fidgety?</p> <p>d. . . . so depressed that nothing could cheer you up?</p> <p>e. . . . that everything was an effort?</p> <p>f. . . . worthless?</p>	Kessler-6 ¹¹

Item	Source
<p>Q27. In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:</p> <p>Yes, No</p> <p>a. Have had nightmares about it or thought about it when you did not want to?</p> <p>b. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?</p> <p>c. Were constantly on guard, watchful, or easily startled?</p> <p>d. Felt numb or detached from others, activities, or your surroundings?</p>	PC-PTSD ¹²
<p>Q28. Over the past 2 weeks, how often have you been bothered by any of the following problems?</p> <p>Not at all, Several days, More than half the days, Nearly every day</p> <p>a. Little interest or pleasure in doing things</p> <p>b. Feeling down, depressed, or hopeless</p>	PHQ-2 ¹³
<p>Q29. How often do you have a drink containing alcohol?</p> <p>Never</p> <p>Monthly or less</p> <p>2 to 4 times a month</p> <p>2 to 3 times a week</p> <p>4 or more times a week</p>	AUDIT ¹⁴
<p>Q30. How many drinks containing alcohol do you have on a typical day when you are drinking?</p> <p>1 or 2</p> <p>3 or 4</p> <p>5 or 6</p> <p>7, 8, or 9</p> <p>10 or more</p>	AUDIT ¹⁴
<p>Q31. How often do you have six or more drinks on one occasion?</p> <p>Never</p> <p>Less than monthly</p> <p>Monthly</p> <p>Weekly</p> <p>Daily or almost daily</p>	AUDIT ¹⁴
<p>Q32. How often during the last year have you found that you were not able to stop drinking once you had started?</p> <p>Never</p> <p>Less than monthly</p> <p>Monthly</p> <p>Weekly</p> <p>Daily or almost daily</p>	AUDIT ¹⁴

Item	Source
Q33. How often during the last year have you failed to do what was normally expected from you because of drinking? Never Less than monthly Monthly Weekly Daily or almost daily	AUDIT ¹⁴
Q34. How often during the last year have you been unable to remember what happened the night before because you had been drinking? Never Less than monthly Monthly Weekly Daily or almost daily	AUDIT ¹⁴
Q35. How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking? Never Less than monthly Monthly Weekly Daily or almost daily	AUDIT ¹⁴
Q36. How often during the last year have you had a feeling of guilt or remorse after drinking? Never Less than monthly Monthly Weekly Daily or almost daily	AUDIT ¹⁴
Q37. Have you or someone else ever been injured as a result of your drinking? No Yes, but not in the last year Yes, during the last year	AUDIT ¹⁴
Q38. Has a relative, friend, doctor, or another health professional ever expressed concern about your drinking or suggested you cut down? No Yes, but not in the last year Yes, during the last year	AUDIT ¹⁴

Item	Source
<p>The following questions (Q39 to Q48) concern information about your possible involvement with drugs not including alcoholic beverages during the past 12 months.</p>	DAST ¹⁵⁻¹⁶
<p>“Drug abuse” refers to (1) the use of prescribed or over-the-counter drugs in excess of the directions, and (2) any nonmedical use of drugs.</p>	
<p>The various classes of drugs may include cannabis (marijuana, hashish), solvents (e.g., paint thinner), tranquilizers (e.g., Valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD) or narcotics (e.g., heroin). Remember that the questions do not include alcoholic beverages.</p>	
<p>Please answer every question. If you have difficulty with a statement, then choose the response that is mostly right. Remember, all your answers are confidential and will not be traced back to you.</p>	
<p>These questions refer to the past 12 months only.</p>	
<p>Q39. In the past 12 months, have you used drugs other than those required for medical reasons?</p>	
<p>Yes No</p>	
<p>Q40. In the past 12 months, have you abused more than one drug at a time?</p>	
<p>Yes No</p>	
<p>Q41. In the past 12 months, have you always been able to stop abusing drugs when you wanted to?</p>	
<p>Yes No</p>	
<p>Q42. In the past 12 months, have you had blackouts or flashbacks as a result of drug use?</p>	
<p>Yes No</p>	
<p>Q43. In the past 12 months, have you ever felt bad or guilty about your drug use?</p>	
<p>Yes No</p>	
<p>Q44. In the past 12 months, has your spouse (or parents) ever complained about your involvement with drugs?</p>	
<p>Yes No</p>	
<p>Q45. In the past 12 months, have you neglected your family because of your use of drugs?</p>	
<p>Yes No</p>	

Item	Source
Q46. In the past 12 months, have you engaged in illegal activities in order to obtain drugs? Yes No	
Q47. In the past 12 months, have you experienced withdrawal symptoms (felt sick) when you stopped taking drugs? Yes No	
Q48. In the past 12 months, have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding)? Yes No	
Q49. Was there ever a time during the past 24 months when you felt that you might need to see a professional because of problems with your emotions or nerves or your use of alcohol or drugs? Yes No	National Comorbidity Study ¹⁷
Q50. In the past 24 months, has a health care professional told you that you have any of the following? Yes, No, Not sure a. Posttraumatic stress disorder or PTSD b. Depression c. Alcohol dependence d. Drug dependence e. Any anxiety disorder f. Traumatic brain injury or TBI g. Any other mental or behavioral health issue	New development
Q51. About how many miles from where you live is the nearest VA facility that offers mental health services? 0–10 miles 10–20 miles 21–30 miles 31–40 miles 41–50 miles More than 50 miles Not sure	National Survey of Women Veterans, ⁹ MODIFIED
Q52. How long does it take to get from where you live to the nearest VA facility that offers mental health services? Less than 10 minutes 10 to 20 minutes 21 to 30 minutes 31 to 45 minutes 46 minutes to one hour More than one hour Not sure	New development

Item	Source
<p>Q53. Would you say that transportation to the nearest VA facility that offers mental health services is:</p> <p>Very easy Somewhat easy Neither easy nor hard Somewhat hard Very hard Not sure</p>	Barriers for Women Veterans to VA ¹⁸ Health, MODIFIED
<p>Q54. There is a VA provider in my area that offers all of the <u>mental health care services</u> Veterans need.</p> <p>Strongly agree Somewhat agree Somewhat disagree Strongly disagree Not sure</p>	2011 Survey of Veteran Enrollees' Health and Reliance Upon VA, ¹⁹ MODIFIED
<p>Q55. How burdensome is the process for obtaining <u>mental health care</u> through the VA (e.g., paperwork, enrollment, scheduling)?</p> <p>Very burdensome Somewhat burdensome Not very burdensome Not burdensome at all Not sure</p>	New development
<p>Q56. In the past 24 months, how often was it easy to get appointments with <u>VA mental health providers</u>?</p> <p>Never Sometimes Usually Always I have not tried to get an appointment with a VA mental health provider in the past 24 months</p>	Survey of Healthcare Experiences of Patients Ambulatory Care 2013, ²⁰ MODIFIED (to add does not apply type option)
<p>Q57. In the past 24 months, how often were you able to get the <u>mental health care</u> you needed from a VA facility during evenings, weekends, or holidays?</p> <p>Never Sometimes Usually Always I have not tried to get an appointment during evenings, weekends, or holidays in the past 24 months.</p>	Survey of Healthcare Experiences of Patients Ambulatory Care 2013, ²⁰ MODIFIED (to add does not apply type option)
<p>Q58. During the past 24 months, how satisfied were you with the period of time between requesting a VA appointment for <u>mental health care</u> and the actual appointment date?</p> <p>Very satisfied Somewhat satisfied Somewhat dissatisfied Very dissatisfied</p>	National Survey of Women Veterans, ⁹ MODIFIED (to be specific to mental health care)

Item	Source
<p>Q59. Thinking about the past 24 months, how satisfied or dissatisfied are you with the <u>availability</u> of the following <u>health care services</u> at the VA?</p> <p>Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied, No opinion</p> <p>a. Primary care services b. General mental health services c. Specialized mental health services such as programs for treatment of PTSD, substance abuse, or other conditions</p>	New development
<p>Q60. Thinking about the past 24 months, how satisfied or dissatisfied are you with the availability of the following types of <u>mental health providers</u> at the VA?</p> <p>Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied, No opinion</p> <p>a. Psychiatrists b. Psychologists c. Social workers d. Nurse practitioners e. Addictions counselors f. Chaplain services/pastoral care</p>	New development
<p>Q61. Thinking about the past 24 months, how satisfied or dissatisfied are you with the availability of the following <u>mental health services</u> at the VA?</p> <p>Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied, No opinion</p> <p>a. Medication management b. Psychotherapy (talk therapy) c. Group therapy d. Emergency services (for example, crisis hotlines and other 24 hour services) e. Case management</p>	New development

Item	Source
<p>Q62. The following is a list of reasons why you might have chosen to use the VA for <u>mental health care</u> in the past 24 months. Please indicate how strongly you agree or disagree with each of these reasons.</p> <p>You chose to use the VA for <u>mental health care</u> because:</p> <p>Strongly agree, Somewhat agree, Somewhat disagree, Strongly disagree</p> <ul style="list-style-type: none"> a. The VA's location is convenient b. The VA is the only source of mental health care available to you c. The VA provides services you cannot get elsewhere d. You can get care for a service connected disability e. The VA provides a higher quality of care f. You like the doctors at the VA, or you have been going there for years (that is, you are familiar with the VA) g. VA care costs less than other care available to you h. You lost or had inadequate levels of insurance coverage i. The VA provides prescription benefits j. You are entitled to it k. Your spouse or friends suggested that you get care at the VA 	National Survey of Women Veterans ⁹
<p>Q63. Choices for your treatment or health care can include choices about medicine or other treatment. In the past 24 months, did a VA <u>mental health provider</u> tell you there was more than one choice for your treatment or health care?</p> <p>Yes No</p>	Survey of Healthcare Experiences of Patients Ambulatory Care 2013, ²⁰ MODIFIED (to be specific to mental health)
<p>Q64. Did the VA mental health provider you have seen most recently help you . . .</p> <p>A lot Some A little Not at all</p>	Post-Deployment Health of Armed Forces Personnel, ²¹ MODIFIED (to specify most recent provider)
<p>Q65. All things considered, how satisfied are you with your mental health care at the VA in the past 24 months?</p> <p>Completely satisfied Very satisfied Somewhat satisfied Neither satisfied nor dissatisfied Somewhat dissatisfied Very dissatisfied Completely dissatisfied</p>	National Health Study for a New Generation of U.S. Veterans ¹
<p>Q66. In the past 24 months, what effect has the counseling or treatment you got through the VA had on the quality of your life?</p> <p>Very helpful A little helpful Not helpful or harmful A little harmful Very harmful</p>	Experience of Care and Health Outcomes (ECHO [®]) Survey Adult Supplemental Items ²²

Item	Source
<p>Q67. In the past 24 months, have you ended treatment with a VA mental health provider before the provider wanted you to?</p> <p>Yes No</p>	New development
<p>Q68. Either based on your own experiences or what you have heard from others, please rate your opinion of the following aspects of <u>VA mental health care</u>:</p> <p>Extremely negative, Somewhat negative, Neutral, Somewhat positive, Extremely positive</p> <p>a. Availability of needed services b. Privacy and confidentiality of medical records c. Ease of using VA mental health care d. Mental health care staff's skill and expertise e. Staff's courtesy and respect toward patients</p>	Survey of Post-deployment Adjustment Among Enduring Freedom & Operational Iraqi Freedom (OEF/OIF) Veterans ²³
<p>Q69. How would you rate the following aspects of the VA <u>mental health</u> treatment facility:</p> <p>Poor, Fair, Good, Very Good, Excellent, Don't know</p> <p>a. Cleanliness of the reception/waiting area b. Cleanliness of the restroom/lavatory c. Availability of parking d. The building overall (i.e., attractiveness of facility appearance, quality of building maintenance and upkeep)</p>	Survey of Healthcare Experiences of Patients Ambulatory Care 2013 ²⁰
<p>Q70. How satisfied or dissatisfied are you with the availability of personnel at VA facilities offering <u>mental health care</u> to answer your questions . . .</p> <p>Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied, Does not apply, have not had this experience</p> <p>a. Over the phone? b. In person once you arrive at the facility?</p>	New development
<p>Q71. At the VA, you can see the <u>same mental health care provider</u> on most visits.</p> <p>Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree Not sure</p>	National Survey of Women Veterans, ⁹ MODIFIED (to include Not sure option)
<p>Q72. <u>VA mental health care providers</u> give Veterans more than one choice for treatment or health care.</p> <p>Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree Not sure</p>	New development

Item	Source
<p>Q73. What were the reasons you did not use the VA for <u>mental health care services</u> in the past 24 months?</p> <p>Was it because . . .</p> <p>Yes, No</p> <p>a. You were not aware of VA mental health care benefits?</p> <p>b. You do not know how to apply for VA mental health care benefits?</p> <p>c. You do not feel you deserve to receive mental health care from the VA?</p> <p>d. You do not believe you are entitled to or eligible for VA mental health care benefits?</p> <p>e. You have had a bad prior experience at the VA?</p> <p>f. You do not feel welcome at the VA?</p> <p>g. You do not trust the VA?</p> <p>h. You do not want assistance from the VA?</p> <p>i. You use other sources of mental health care?</p> <p>j. You do not need care?</p> <p>k. Some other reason?</p>	<p>2010 National Survey of Veterans,³ MODIFIED (to add items)</p>
<p>Q74. Veterans may face obstacles getting or using <u>mental health services</u> for a number of reasons. Please indicate whether or not each of the following is an obstacle for you, personally, for getting or using mental health services.</p> <p>Yes, No, Not Applicable</p> <p>a. I could lose contact with or custody of my children.</p> <p>b. It would be difficult to get childcare or time off of work.</p> <p>c. It could harm my career.</p> <p>d. My coworkers would have less confidence in me if they found out.</p> <p>e. My supervisor might respect me less or treat me differently.</p> <p>f. I could lose my medical or disability benefits.</p> <p>g. My personal firearms could be taken away.</p> <p>h. I could be denied a security clearance in the future.</p> <p>i. My friends and family would respect me less.</p> <p>j. I would think less of myself if I could not handle it on my own.</p> <p>k. I would be seen as weak by others.</p> <p>l. It would be too embarrassing.</p> <p>m. Mental health care would cost too much money.</p>	<p>Modified from Post- deployment Health of Armed Forces Personnel;²¹ Elbogen et al., 2013;²⁴ Sharp et al., 2015²⁵</p>
<p>Q75. How strongly do you agree or disagree with the following statements? Think about the mental health provider you have seen most often over the past 24 months.</p> <p>Strongly agree, Somewhat agree, Somewhat disagree, Strongly disagree</p> <p>a. My mental health provider understands my background and values.</p> <p>b. My mental health provider looks down on me and the way I live my life.</p> <p>c. I feel welcome at my mental health provider's office.</p>	<p>Survey of Disparities in Quality of Health Care: Spring 2001²⁶ and new development</p>

Item	Source
<p>Q76. In the past 24 months, how often did you have a hard time communicating with your mental health provider because of accents or language barriers?</p> <p>Never Sometimes Usually Always</p>	<p>Survey of Healthcare Experiences of Patients Ambulatory Care 2013²⁰</p>
<p>Q77. In the past 24 months, have any of the following people in your life encouraged you to get treatment for PTSD or other emotional problems?</p> <p>Yes, No</p> <p>a. Spouse or significant other b. Mother or father c. Other family members d. Other Veterans e. Friends f. Medical providers g. Employers or coworkers</p>	<p>Spoont et al., 2014²⁷ MODIFIED (to include coworkers)</p>
<p>Q78. Read each statement carefully and indicate your degree of agreement using the responses below.</p> <p>Strongly agree, Somewhat agree, Somewhat disagree, Strongly disagree</p> <p>a. If I believed I was having a mental breakdown, my first inclination would be to get professional attention. b. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts. c. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy. d. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help. e. I would want to get psychological help if I were worried or upset for a long period of time. f. I might want to have psychological counseling in the future. g. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help. h. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me. i. A person should work out his or her own problems; getting psychological counseling would be a last resort. j. Personal and emotional troubles, like many things, tend to work out by themselves.</p>	<p>Attitudes Toward Seeking Professional Help scale,²⁸ MODIFIED (response options modified to fit with similar questions in the survey)</p>

Item	Source
Q79. How likely are you to use <u>any</u> VA services in the future? Very likely Likely Somewhat likely Not likely at all	New development
Q80. If you had a mental health need in the future, how likely would you be to use the VA for <u>mental health services</u> ? Very likely Likely Somewhat likely Not likely at all	New development
Q81. What are the reasons you do not plan to use VA <u>mental health services</u> in the future? Is it because . . . Yes, No a. Mental health treatment generally does not work? b. You used the VA before and had a bad experience? c. You used the VA before and did not improve? d. VA doctors/staff do not provide good quality treatment? e. You prefer your civilian health care provider? f. The facilities are too far away/too hard to get to? g. The facilities are not clean or attractive? h. You would have to wait too long for an appointment?	New development
Q82. How important is it to you that the VA makes the following changes? Very important, Moderately important, Slightly important, Not at all important a. Easier appointment process b. Nicer facilities c. Closer facilities d. More available services or facilities e. Better quality services f. Better quality customer service	New development
Q83. How likely would you be to recommend VA mental health services to other Veterans? Very likely Likely Somewhat likely Not likely at all	New development
Q84. Would you use VA mental health services by any of the following modes in the future? Definitely yes, Probably yes, Probably no, Definitely no a. In person b. Internet c. Phone	New development

1. U.S. Department of Veterans Affairs. 2009. *National Health Study for a New Generation of U.S. Veterans*. Washington, DC: U.S. Department of Veterans Affairs.
2. Kulka, R. A., W. E. Schlenger, J. A. Fairbank, R. L. Hough, B. K. Jordan, C. R. Marmar, and D. S. Weiss, D. S. 1988. *Contractual report of findings from the National Vietnam Veterans' Readjustment Study: Volumes 1–4*. North Carolina: Research Triangle Institute.
3. Westat. 2010. *National survey of veterans*. Rockville, MD: Westat.
4. Westat. 2014. *Wounded Warrior Project annual alumni survey*. Rockville, MD: Westat.
5. Vogt, D. S., B. N. Smith, L. A. King, D. W. King, J. A. Knight, and J. J. Vasterling. 2013. Deployment Risk and Resilience Inventory-2 (DRRI-2): An updated tool for assessing psychosocial risk and resilience factors among service members and Veterans. *Journal of Traumatic Stress* 26:710–717. doi: 10.1002.jts.21868 PILOTS ID: 87988.
6. Westat, U.S. Department of Veteran Affairs. 2011. *HealthViEWS study: Health of Vietnam Era Women's Study survey*. Rockville, MD: Westat.
7. CDC (Centers for Disease Control and Prevention)/NCHS (National Center for Health Statistics). 2014. *National Health and Nutrition Examination Survey questionnaire*. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
8. U.S. Census Bureau. 2014. *American Community Survey*. <https://www2.census.gov/programs-surveys/acs/methodology/questionnaires/2014/quest14.pdf>.
9. VA (U.S. Department of Veterans Affairs). 2009. *National Survey of Women Veterans*. <https://www.reginfo.gov/public/do/DownloadDocument?objectID=6395701>.
10. Kazis, L. E., D. R. Miller, J. A. Clark, K. M. Skinner, A. Lee, X. S. Ren, A. Spiro, 3rd, W. H. Rogers, and J. E. Ware, Jr. 2004. Improving the response choices on the Veterans Sf-36 Health Survey Role functioning scales: Results from the Veterans Health Study. *Journal of Ambulatory Care Management* 27(3):263–280.
11. Kessler, R. C., P. R. Barker, L. J. Colpe, J. F. Epstein, J. C. Gfroerer, E. Hiripi, M. J. Howes, S.-L. T. Normand, R. W. Manderscheid, E. E. Walters, and A. M. Zaslavsky. 2003. Screening for serious mental illness in the general population. *Archives of General Psychiatry* 60(2):184–189.
12. Prins, A., P. Ouimette, R. Kimerling, R. P. Cameron, D. S. Hugelshofer, J. Shaw-Hegwer, A. Thraikill, F. D. Gusman, and J. I. Sheikh. 2003. The Primary Care PTSD screen (PC-PTSD): Development and operating characteristics (PDF). *Primary Care Psychiatry* 9:9–14. doi: 10.1185/135525703125002360.
13. Kroenke, K., R. L. Spitzer, and J. B. Williams. 2003. The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care* 41:1284–1292.
14. Babor, T. F., J. R. de la Fuente J. Saunders, and M. Grant. 1992. *AUDIT: The Alcohol Use Disorders Identification Test. Guidelines for use in primary health care*. Geneva: World Health Organization.
15. Skinner, H. A. 1982. The Drug Abuse Screening Test. *Addict Behavior* 7(4):363–371.
16. Yudko, E., O. Lozhkina, and A. Fouts. 2007. A comprehensive review of the psychometric properties of the Drug Abuse Screening Test. *Journal of Substance Abuse and Treatment* 32:189–198.
17. Kessler, R. C. 2000. *National Comorbidity Survey: Baseline, 1990–1992*. ICPSR Data Holdings. doi:10.3886/ICPSR06693.v6.
18. Altarum Institute, U.S. Department of Veterans Affairs. 2015. *Study of barriers for women veterans to VA health care: Final report*. https://www.womenshealth.va.gov/docs/Womens%20Health%20Services_Barriers%20to%20Care%20Final%20Report_April2015.pdf.
19. U.S. Department of Veterans Affairs, Veterans Health Administration Office of the Assistant Deputy Under Secretary for Health for Policy and Planning. 2012. *2011 survey of veteran enrollees' health and reliance Upon VA*. https://www.va.gov/HEALTHPOLICYPLANNING/SOE2011/SoE2011_Report.pdf.
20. VA (U.S. Department of Veterans Affairs). 2013. *Survey of healthcare experiences of patients' ambulatory care 2013*. <https://www.reginfo.gov/public/do/DownloadDocument?objectID=40394201>.
21. RAND. 2007. *Post-deployment health Of Armed Forces personnel survey*. Santa Monica, CA: RAND Corporation.
22. AHRQ (Agency for Healthcare Research and Quality). 2007. *Experience of Care and Outcomes (ECHO) survey: Adult supplemental items, version 3.0*. <https://www.ahrq.gov/cahps/surveys-guidance/echo/instructions/mcosurveylist.html>.
23. VA (U.S. Department of Veterans Affairs). 2012. *Survey of post-deployment adjustment among Operation Enduring Freedom & Operation Iraqi Freedom (OEF/OIF) veterans*. https://www.reginfo.gov/public/do/PRAViewIC?ref_nbr=201111-2900-008&icID=186169.
24. Elbogen, E. B., H. R. Wagner, S. C. Johnson, P. Kinneer, H. Kang, J. J. Vasterling, C. Timko, and J. C. Beckham. 2013. Are Iraq and Afghanistan veterans using mental health services? New data from a national random-sample survey. *Psychiatric Services* 64(2):134–141. doi: 10.1176/appi.ps.004792011.
25. Sharp, M., N. T. Fear, R. J. Rona, S. Wessely, N. Greenberg, N. Jones, and L. Goodwin. 2015. Stigma as a barrier to seeking health care among military personnel with mental health problems. *Epidemiologic Review* 37:144–162 doi: 10.1093/epirev/mxu012.

26. Commonwealth Fund, Princeton Survey Research Associates. 2001. *Survey on disparities on quality of health care*. http://www.commonwealthfund.org/usr_doc/qualitysurvey_2001_questionnaire.pdf.
27. Spont, M. R., D. B. Nelson, M. Murdoch, T. Rector, N. A. Sayer, S. Nugent, and J. Westermeyer. 2014. Impact of treatment beliefs and social network encouragement on initiation of care by VA service users with PTSD. *Psychiatric Services* 65(5):654–662. doi: 10.1176/appi.ps.201200324.
28. Whittlesey, V. 2001. *Diversity activities for psychology*. Boston: Allyn and Bacon, and Fischer, E., and A. Farina. 1995. Attitudes toward seeking psychological professional help: A shortened form and considerations for research. *Journal of College Student Development* 36:368–373.
29. Commonwealth Fund, Princeton Survey Research Associates. (2001). *Survey on Disparities on Quality of Health Care*. http://www.commonwealthfund.org/usr_doc/qualitysurvey_2001_questionnaire.pdf.
30. Spont, M. R., D. B. Nelson, M. Murdoch, T. Rector, N. A. Sayer, S. Nugent, and J. Westermeyer. 2014. Impact of treatment beliefs and social network encouragement on initiation of care by VA service users with PTSD. *Psychiatric Services* 65(5):654–662. doi: 10.1176/appi.ps.201200324.
31. Whittlesey, V. (2001). *Diversity activities for psychology*. Boston: Allyn and Bacon, and Fischer, E., and Farina, A. 1995. Attitudes toward seeking psychological professional help: A shortened form and considerations for research. *Journal of College Student Development*, 36, 368-373.

FINAL SURVEY INSTRUMENT (ANNOTATED)

OEF/OIF/OND Veterans' Access to Health Services Survey

OMB# 2900-0842

Estimated burden: 35 minutes

Expiration Date 3/31/2019

The Paperwork Reduction Act of 1995: This information is collected in accordance with section 3507 of the Paperwork Reduction Act of 1995. Accordingly, we may not conduct or sponsor and you are not required to respond to, a collection of information unless it displays a valid OMB number. We anticipate that the time expended by all individuals who complete this survey will average 35 minutes. This includes the time it will take to follow instructions, gather the necessary facts and respond to questions asked. The purpose of this web-based survey is to help VA to better understand why Veterans choose to use or not use VA mental health services available to them. The survey results will lead to improvements in the quality of service delivery by helping to improve Veterans' access to VA mental health services. Participation in this survey is voluntary and failure to respond will have no impact on benefits to which you may be entitled.

Welcome

INFORMED CONSENT STATEMENT

SURVEY PURPOSE: The National Academies of Sciences, Engineering, and Medicine (the Academies) is conducting this study on behalf of the Department of Veterans Affairs (VA) to evaluate the mental health care provided to Veterans of the Iraq and Afghanistan operations. Results from this study will be used by Congress and the VA to better understand why Veterans choose to use or not use VA services available to them, and will also help improve Veterans' access to VA mental

health services. The Academies have partnered with Westat, an independent contractor, to conduct this survey.

VOLUNTARY RESPONSE/CONFIDENTIALITY:

Your participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits. We will do everything we can to keep all data confidential, including your survey responses and administrative data that Westat, our contractor, receives from the VA about health services you may have used. Only researchers at Westat and the Academies-appointed experts who are approved to work on this study and who have signed an agreement to keep all data confidential will have access to individual survey and administrative data for analysis purposes. Westat will provide the VA with the survey responses, but will have deleted your name and any other information that could be used to identify you. The Academies will release a publicly available report in 2017. When reporting the results of this study, all information about you will be combined with information from other Veterans, and only group statistics will be reported. We will not disclose your responses or data to anyone who could use it to identify you or any other participants. Westat will destroy all data in its possession no later than one year after the study has been completed or, if the VA requests additional analysis, after that analysis has been completed.

To further help us protect your privacy, we have obtained a Certificate of Confidentiality from the United States Department of Health and Human Services (DHHS). With this Certificate, we cannot be forced (for example by court order or subpoena) to disclose information that may identify you in any federal, state, local, civil, criminal, legislative, administrative, or other proceedings. The researchers will use the Certificate to resist any demands for information that would identify you, except to prevent serious harm to you or others, and as explained below. You should understand that a Certificate of Confidentiality does not prevent you, or a member of your family, from voluntarily releasing information about yourself, your family, or your involvement in this study. If an insurer or employer learns about your participation, and obtains your consent to receive research information, then we may not use the Certificate of Confidentiality to withhold this information.

This means that you and your family must also actively protect your own privacy. You should understand that we will in all cases, take the necessary action, including reporting to authorities, to prevent serious harm to yourself, children, or others. A Certificate of Confidentiality does not represent an endorsement of the research study by the Department of Health and Human Services or the National Institutes of Health.

SURVEY LENGTH: This web survey will take approximately 35 minutes to complete. Depending on your responses, it may take more or less time.

RESOURCES FOR YOU: The survey contains some sensitive questions that you may find upsetting. Sometimes people who answer questions about their experiences or how they are feeling would like to talk to a mental health specialist. If you feel this way at any time, click the “Mental Health Resource” button located at the bottom of each page.

HOW TO COMPLETE THE SURVEY: After you complete each page, you may go to the next page by clicking on the “Next>>” button. If you wish to review a previous answer, click on the “<<Previous”

button. If you need to save your responses and complete the survey later, click on the “Save and Continue Later” button. When you log on later, you can continue where you left off.

TO THANK YOU: We know your time is valuable. To thank you for your participation, we will send you {\$5/\$20} in the mail after we receive your survey.

To begin your survey, click the “Next>>” button below. Doing so also implies your consent to participate in the survey.

Derived variables to guide survey pathways, based on self-response:

ALL RESPONDENTS WILL BEGIN WITH VAUSER = 0; CIVUSER = 0; AND POSSCRN = 0

[MONTH, YEAR] = Month user first accessed survey, year-2 (will be 2014)

OEF/OIF/OND Veterans' Access to Health Services Survey

Military History and Demographics

The following questions ask some basic information about you and your military history.

1. In what component(s) have you served?

Select all that apply

Active Duty **COMP_1**

Reserve **COMP_2**

National Guard **COMP_3**

2. In what branch(es) did you serve?

Select all that apply

Army **BRANCH_1**

Marine Corps **BRANCH_2**

Navy **BRANCH_3**

Air Force **BRANCH_4**

Coast Guard **BRANCH_5**

3. What was the highest rank and pay grade you held while in the military? RANK

E1–E4 **1**

E5–E6 **2**

E7–E9 **3**

W1–W5 **4**

O1–O3 **5**

O4–O6 **6**

O7–O10 **7**

4. Do you have a VA service-connected disability rating? RATING_1

Yes → continue to question 5 **1**

No → skip to question 6 **0**

[IF MISSING, SKIP TO DEP_TIME]

5. What is your VA service-connected disability rating? RATING_2

0 percent **1**

10 to 20 percent **2**

30 to 40 percent **3**

50 to 60 percent **4**

70 percent or higher **5**

Don't know **98**

6. Since September 11, 2001, how many months were you away in total for all deployments in support of OEF/OIF/OND? Include deployments to a combat area, noncombat area, or training mission. DEP_TIME

1–6 months **1**

7–12 months **2**

13–24 months **3**

25–36 months **4**

37–48 months **5**

More than 48 months **6**

I have not been deployed in support of OEF/OIF/OND since September 11, 2001 → skip to DOB **7**

[IF MISSING, SKIP TO DOB]

The next few questions ask about experiences you may have had while deployed.

7. How many of your deployments in support of OEF/OIF/OND were to the following combat areas? Mark zero if no deployments to these areas.

	Zero 0	1 1	2 2	3 3	4 4	5 5	6 to 9 6	10 or more 7
a. Iraq COMB_1	<input type="radio"/>							
b. Afghanistan COMB_2	<input type="radio"/>							
c. Other combat area COMB_3	<input type="radio"/>							

8. The statements below are about your experiences. Please indicate if you experienced the following events during your deployments in support of OEF/OIF/OND since September 11, 2001 by selecting the response that best fits your answer.

	Never 0	Once or twice 1	Several times over entire deployment 2	A few times each month 3	A few times each week 4	Daily or almost daily 5
a. I saw the bodies of dead enemy combatants. DEP_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I encountered land or water mines, booby traps, or roadside bombs (for example, IEDs). DEP_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I saw refugees who had lost their homes or belongings. DEP_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I fired my weapon at enemy combatants. DEP_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I saw civilians after they had been severely wounded or disfigured. DEP_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I was involved in searching and/or disarming potential enemy combatants. DEP_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I went on combat patrols or missions. DEP_7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Never 0	Once or twice 1	Several times over entire deployment 2	A few times each month 3	A few times each week 4	Daily or almost daily 5
h. I personally witnessed someone from my unit or an ally unit being seriously wounded or killed. DEP_8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I was exposed to hostile incoming fire. DEP_9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. What is your date of birth?

| | / | | / | | | |
 M M / D D / Y Y Y Y

DOB_MONTH DOB_DAY DOB_YEAR

10. Are you male or female? GENDER

Male 1
 Female 2

11. Are you of Hispanic, Latino, or Spanish origin?

Select all that apply

No, not of Hispanic, Latino, or Spanish origin **HISP_1**
 Yes, Mexican, Mexican American, or Chicano **HISP_2**
 Yes, Puerto Rican **HISP_3**
 Yes, Cuban **HISP_4**
 Yes, another Hispanic, Latino, or Spanish origin — *Specify origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.* **HISP_5**
 | _____ | **HISP_HISPOTHER**

12. What is your race?

Select all that apply

White **RACE_1**
 Black or African American **RACE_2**
 American Indian or Alaska Native — *Specify name of enrolled or principal tribe* **RACE_3**
 | _____ | **RACE_3SPEC**
 Asian Indian **RACE_4**
 Chinese **RACE_5**
 Filipino **RACE_6**
 Japanese **RACE_7**
 Korean **RACE_8**
 Vietnamese **RACE_9**
 Other Asian — *Specify race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on* **RACE_10**
 | _____ | **RACE_10SPEC**

Native Hawaiian **RACE_11**

Guamanian or Chamorro **RACE_12**

Samoaan **RACE_13**

Other Pacific Islander — *Specify race, for example, Fijian, Tongan, and so on.* **RACE_14**

| _____ | **RACE_14SPEC**

Some other race — *Specify race* **RACE_15**

| _____ | **RACE_15SPEC**

13. What is the highest degree or level of school you have completed? EDU

Less than high school **1**

GED **2**

High school diploma **3**

Some college credit, but less than 1 year of college credit **4**

1 or more years of college credit, no degree **5**

Associate's degree (for example, AA, AS) **6**

Bachelor's degree (for example, BA, BS) **7**

Master's degree (for example, MA, MS, MEng, MEd, MSW, MBA) **8**

Professional degree beyond a bachelor's degree (for example, MD, DDS, DVM, LLB, JD) **9**

Doctorate degree (for example, PhD, EdD) **10**

14. During the last week, were you . . . EMP

Working, or on paid vacation or sick leave from work → skip to q16 **1**

Not working, but looking for work → skip to q16 **2**

Not working and not looking for work → continue to q15 **3**

[IF MISSING, SKIP TO MARITAL]

15. What is the main reason you were not looking for work? UNEMP

You are retired **1**

You are disabled **2**

You were unable to work because of other health-related reasons **3**

You stopped looking for work because you could not find work **4**

You were temporarily laid off from work **5**

You were taking care of your home and family **6**

You were going to school **7**

16. What is your current marital status? MARITAL

Now Married **1**

Widowed **2**

Divorced **3**

Separated **4**

Never Married **5**

Civil Commitment or Union **6**

17. How many people, including yourself, live in your household? HSHLD

| | |

18. Which income range category represents the total combined income of all members of this household during the past 12 months? INC

- Less than \$10,000 **1**
- \$10,000 to \$24,999 **2**
- \$25,000 to \$49,999 **3**
- \$50,000 to \$74,999 **4**
- \$75,000 to \$99,999 **5**
- \$100,000 to \$149,999 **6**
- \$150,000 or more **7**

19. Are you CURRENTLY covered by any of the following types of health insurance or health coverage plans?

Select all that apply

- No health insurance **INS_1**
- VA (including those who have ever used or enrolled for VA health care) **INS_2**
- Insurance through a current or former employer or union (of yours or another family member) **INS_3**
- Insurance purchased directly from an insurance company (by you or another family member) **INS_4**
- Insurance through HealthCare.gov or a state insurance marketplace or exchange **INS_5**
- Medicare, for people 65 and older, or people with certain disabilities **INS_6**
- Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability **INS_7**
- TRICARE, TRICARE for Life, or other military health care **INS_8**
- Indian Health Service **INS_9**
- Any other type of health insurance or health coverage plan **INS_10** [specify]
 _____ **INS_10OTHER**

Use of VA Services

The next few questions ask about your use of VA benefits and services. When answering these questions, think about your use of VA benefits and services over the past 24 months, that is, since [MONTH, YEAR].

20. In the past 24 months, have you used any of the following VA benefits or services? Select Yes or No for each item

	Yes 1	No 0
a. Home loans VABEN_1	<input type="radio"/>	<input type="radio"/>
b. Housing Assistance (HUD-VASH, etc.) VABEN_2	<input type="radio"/>	<input type="radio"/>
c. Education and training (Post-9/11 GI Bill, etc.) VABEN_3	<input type="radio"/>	<input type="radio"/>
d. Vocational rehabilitation and employment VABEN_4	<input type="radio"/>	<input type="radio"/>
e. Disability compensation and pension VABEN_5	<input type="radio"/>	<input type="radio"/>

f. Transition assistance **VABEN_6**

21. In the past 24 months, have you used any of the following physical health care services (any care other than mental health)?

	Yes 1	No, but I am or have been Eligible in the Past 24 Months 2	No, and I have not been Eligible in the Past 24 Months 3
a. Health care at a VA facility HCSERV_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Health care at a non-VA facility paid for by the VA HCSERV_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. In the past 24 months, have you used any of the following mental or behavioral health care services? Select Yes or No for each item

	Yes 1	No 0
a. Mental or behavioral health care through your VA Primary Care Provider MHSERV_1	<input type="radio"/>	<input type="radio"/>
b. Mental or behavioral health care through a VA mental health treatment facility MHSERV_2	<input type="radio"/>	<input type="radio"/>
c. Mental or behavioral health care through a Vet Center MHSERV_3	<input type="radio"/>	<input type="radio"/>
d. Mental or behavioral health care through a non-VA provider, paid for by the VA MHSERV_4	<input type="radio"/>	<input type="radio"/>
e. Any other mental or behavioral health care not paid for by the VA MHSERV_5	<input type="radio"/>	<input type="radio"/>

IF MHSERV_1 OR MHSERV_2 = 1, THEN VAUSER = 1

IF MHSERV_4 OR MHSERV_5 = 1, THEN CIVUSER = 1

IF MH_SERV_1 – MH_SERV_5 = MISSING, CONTINUE TO VASERV

IF MH_SERV_1 AND MH_SERV_2 = 0 OR MISSING, AND ANYMH24 = 1, CONTINUE TO VASERV

IF MH_SERV_1 OR MH_SERV_2 = 1, THEN SKIP TO VAHC

IF MH_SERV_1 AND MH_SERV_2 = 0 AND ANYMH24 = 0 SKIP TO HEALTH AND WELL-BEING SECTION]

23. Have you used the VA for any mental or behavioral health services, either inpatient or outpatient, such as group therapy, psychotherapy, social skills training, or rehabilitation programs since [MONTH, YEAR]? VASERV

Yes **1**

No **0**

IF VASERV = 1, THEN VAUSER = 1

24. [VAUSER = 1] Are you currently receiving mental health care through the VA? VAHC

Yes **1**

No **0**

Health and Well-being

This next section asks about your health, well-being, and lifestyle. Remember, all of your answers are confidential.

To start, think about how you have been feeling over the past 4 weeks.

25. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

	Yes, All of the Time 5	Yes, Most of the Time 4	Yes, Some of the Time 3	Yes, a Little of the Time 2	No, None of the Time 1
a. Accomplished less than you would like. PROB_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Didn't do work or other activities as carefully as usual. PROB_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. During the past 30 days, about how often did you feel . . .

	All of the Time 4	Most of the Time 3	Some of the Time 2	A Little of the Time 1	None of the Time 0
a. . . nervous? FEEL_1	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> 0
b. . . hopeless? FEEL_2	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> 0
c. . . restless or fidgety? FEEL_3	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> 0
d. . . so depressed that nothing could cheer you up? FEEL_4	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> 0
e. . . that everything was an effort? FEEL_5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> 0
f. . . worthless? FEEL_6	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> 0

**MISSING = 0 FOR SCORING
IF FEEL_SCORE ≥ 13, THEN POSSCRN = 1**

27. In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

	Yes 1	No 0
a. Have had nightmares about it or thought about it when you did not want to? FEAR_1	<input type="radio"/> 1	<input type="radio"/> 0
b. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? FEAR_2	<input type="radio"/> 1	<input type="radio"/> 0
c. Were constantly on guard, watchful, or easily startled? FEAR_3	<input type="radio"/> 1	<input type="radio"/> 0

d. Felt numb or detached from others, activities, or your surroundings? **FEAR_4** 1 0

MISSING = 0 FOR SCORING
IF FEAR_SCORE ≥ 3, THEN POSSCRN = 1

The next questions ask about how you have been feeling over the **past 2 weeks**.

28. Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not at All 0	Several Days 1	More than Half the Days 2	Nearly Every Day 3
a. Little interest or pleasure in doing things DEPRESS_1	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
b. Feeling down, depressed, or hopeless DEPRESS_2	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

MISSING = 0 FOR SCORING
IF DEPRESS_SCORE ≥ 3, THEN POSSCRN = 1

These next questions ask about your use of alcohol and drugs over the past year. Again, all your answers are confidential and will not be traced back to you.

29. How often do you have a drink containing alcohol? DRNK_1

- Never **0** → skip to DRNK_9
- Monthly or less **1**
- 2 to 4 times a month **2**
- 2 to 3 times a week **3**
- 4 or more times a week **4**

[If missing, skip to DRNK_9]

30. How many drinks containing alcohol do you have on a typical day when you are drinking? DRNK_2

- 1 or 2 **0**
- 3 or 4 **1**
- 5 or 6 **2**
- 7, 8, or 9 **3**
- 10 or more **4**

31. How often do you have six or more drinks on one occasion? DRNK_3

- Never **0**
- Less than monthly **1**
- Monthly **2**
- Weekly **3**
- Daily or almost daily **4**

32. How often during the last year have you found that you were not able to stop drinking once you had started? DRNK_4

- Never **0**

- Less than monthly **1**
- Monthly **2**
- Weekly **3**
- Daily or almost daily **4**

IF DRNK_3 AND DRNK_4 BOTH = 0 OR MISSING, SKIP TO DRNK_9

33. How often during the last year have you failed to do what was normally expected from you because of drinking? DRNK_5

- Never **0**
- Less than monthly **1**
- Monthly **2**
- Weekly **3**
- Daily or almost daily **4**

34. How often during the last year have you been unable to remember what happened the night before because you had been drinking? DRNK_6

- Never **0**
- Less than monthly **1**
- Monthly **2**
- Weekly **3**
- Daily or almost daily **4**

35. How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking? DRNK_7

- Never **0**
- Less than monthly **1**
- Monthly **2**
- Weekly **3**
- Daily or almost daily **4**

36. How often during the last year have you had a feeling of guilt or remorse after drinking? DRNK_8

- Never **0**
- Less than monthly **1**
- Monthly **2**
- Weekly **3**
- Daily or almost daily **4**

These next two questions are about times you may have **ever** consumed alcohol.

37. Have you or someone else ever been injured as a result of your drinking? DRNK_9No **0**Yes, but not in the last year **1**Yes, during the last year **4****38. Has a relative, friend, doctor, or another health professional ever expressed concern about your drinking or suggested you cut down? DRNK_10**No **0**Yes, but not in the last year **1**Yes, during the last year **4****MISSING = 0 FOR SCORING****DO NOT SCORE IF MORE THAN 3 ITEMS IN DRNK_1 – DRNK_10 MISSING. IF DRNK_SCORE ≥ 16, THEN POSSCRN = 1**

The following questions concern information about your possible involvement with drugs not including alcoholic beverages during the past 12 months.

“Drug abuse” refers to (1) the use of prescribed or over-the-counter drugs in directions, and (2) any nonmedical use of drugs.

The various classes of drugs may include cannabis (marijuana, hashish), solvents (e.g., paint thinner), tranquilizers (e.g., Valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD) or narcotics (e.g., heroin). Remember that the questions do not include alcoholic beverages.

Please answer every question. If you have difficulty with a statement, then choose the response that is mostly right.

Remember, all your answers are confidential and will not be traced back to you. These questions refer to the past 12 months only.

39. In the past 12 months, have you used drugs other than those required for medical reasons? DRUG_1Yes **1**No **0** → Skip to HELP

[IF MISSING, SKIP TO HELP]

40. In the past 12 months, have you abused more than one drug at a time? DRUG_2Yes **1**No **0****41. In the past 12 months, have you always been able to stop abusing drugs when you wanted to? DRUG_3**Yes **0**No **1**

42. In the past 12 months, have you had blackouts or flashbacks as a result of drug use?

DRUG_4

Yes **1**

No **0**

43. In the past 12 months, have you ever felt bad or guilty about your drug use? DRUG_5

Yes **1**

No **0**

44. In the past 12 months, has your spouse (or parents) ever complained about your involvement with drugs? DRUG_6

Yes **1**

No **0**

45. In the past 12 months, have you neglected your family because of your use of drugs?

DRUG_7

Yes **1**

No **0**

46. In the past 12 months, have you engaged in illegal activities in order to obtain drugs?

DRUG_8

Yes **1**

No **0**

47. In the past 12 months, have you experienced withdrawal symptoms (felt sick) when you stopped taking drugs? DRUG_9

Yes **1**

No **0**

48. In the past 12 months, have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding)? DRUG_10

Yes **1**

No **0**

MISSING = 0 FOR SCORING

DO NOT SCORE IF MORE THAN 2 ITEMS IN DRUG_1 – DRUG_10 MISSING. IF DRUG_ SCORE \geq 3, THEN POSSCRN = 1

Now think about your life over the past 24 months.

49. Was there ever a time during the past 24 months when you felt that you might need to see a professional because of problems with your emotions or nerves or your use of alcohol or drugs? HELP

Yes **1**

No **0**

IF HELP = 1, THEN POSSCRN = 1

50. In the past 24 months, has a health care professional told you that you have any of the following?

	Yes 1	No 0	Not Sure 97
a. Posttraumatic stress disorder or PTSD DIAG_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Depression DIAG_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Alcohol dependence DIAG_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Drug dependence DIAG_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Any anxiety disorder DIAG_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Traumatic brain injury or TBI DIAG_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Any other mental or behavioral health issue DIAG_7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IF ANY DIAG_1 – DIAG_7 = 1, THEN POSSCRN = 1

Access to Services [**POSSCRN = 1 OR VAUSER = 1**]

This next section asks about your ability to access mental health services provided by the VA. Please answer each question to the best of your ability even if you have never used the VA for mental health services.

51. About how many miles from where you live is the nearest VA facility that offers mental health services? VAMH_1

0–10 miles **1**

11–20 miles **2**

21–30 miles **3**

31–40 miles **4**

41–50 miles **5**

More than 50 miles **6**

Not sure **97**

52. How long does it take to get from where you live to the nearest VA facility that offers mental health services? VAMH_2

Less than 10 minutes **1**

10 to 20 minutes **2**

21 to 30 minutes **3**

31 to 45 minutes **4**

46 minutes to one hour **5**

More than one hour **6**

Not sure **97**

53. Would you say that transportation to the nearest VA facility that offers mental health services is: VAMH_3

- Very easy **5**
- Somewhat easy **4**
- Neither easy nor hard **3**
- Somewhat hard **2**
- Very hard **1**
- Not sure **97**

How much do you agree or disagree with the following statement?

54. There is a VA provider in my area that offers all of the mental health care services Veterans need. VAMH_4

- Strongly agree **4**
- Somewhat agree **3**
- Somewhat disagree **2**
- Strongly disagree **1**
- Not sure **97**

55. How burdensome is the process for obtaining mental health care through the VA (e.g., paperwork, enrollment, scheduling)? VAMH_5

- Very burdensome **1**
- Somewhat burdensome **2**
- Not very burdensome **3**
- Not burdensome at all **4**
- Not sure **97**

Now, think about your experience with VA mental health services since [MONTH, YEAR].

56. In the past 24 months, how often was it easy to get appointments with VA mental health providers? VAMH_6

- Never **1**
- Sometimes **2**
- Usually **3**
- Always **4**
- I have not tried to get an appointment with a VA mental health provider in the past 24 months **5**
→ skip to AVAIL

[IF MISSING, SKIP TO AVAIL]

57. In the past 24 months, how often were you able to get the mental health care you needed from a VA facility during evenings, weekends, or holidays? VAMH_7

- Never **1**
- Sometimes **2**
- Usually **3**
- Always **4**
- I have not tried to get an appointment during evenings, weekends, or holidays in the past 24 months. **5**

58. During the past 24 months, how satisfied were you with the period of time between requesting a VA appointment for mental health care and the actual appointment date? VAMH_8

- Very satisfied **4**
- Somewhat satisfied **3**
- Somewhat dissatisfied **2**
- Very dissatisfied **1**

59. Thinking about the past 24 months, how satisfied or dissatisfied are you with the availability of the following health care services at the VA?

	Very Satisfied 4	Somewhat Satisfied 3	Somewhat Dissatisfied 2	Very Dissatisfied 1	No Opinion 99
a. Primary care services AVAIL_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. General mental health services AVAIL_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Specialized mental health services such as programs for treatment of PTSD, substance abuse, or other conditions AVAIL_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

60. Thinking about the past 24 months, how satisfied or dissatisfied are you with the availability of the following types of mental health providers at the VA?

	Very Satisfied 4	Somewhat Satisfied 3	Somewhat Dissatisfied 2	Very Dissatisfied 1	No Opinion 99
a. Psychiatrists PROV_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Psychologists PROV_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Social workers PROV_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Nurse practitioners PROV_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Addictions counselors PROV_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Chaplain services/Pastoral care PROV_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

61. Thinking about the past 24 months, how satisfied or dissatisfied are you with the availability of the following mental health services at the VA?

	Very Satisfied 4	Somewhat Satisfied 3	Somewhat Dissatisfied 2	Very Dissatisfied 1	No Opinion 99
a. Medication management SAT_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Psychotherapy (talk therapy) SAT_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Group therapy SAT_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Emergency services (for example, crisis hotlines and other 24 hour services) SAT_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Case management SAT_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Experience with VA Mental Health Services [POSSCRN = 1 OR VAUSER = 1]
[INTRO IF VAUSER = 1]**

Veterans have different experiences when using the VA for mental health services. Think about your own experience with VA mental health services since [MONTH, YEAR].

62. [VAUSER = 1] The following is a list of reasons why you might have chosen to use the VA for mental health care in the past 24 months. Please indicate how strongly you agree or disagree with each of these reasons.

You chose to use the VA for mental health care because:

	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
a. The VA's location is convenient CHOSE_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The VA is the only source of mental health care available to you CHOSE_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. The VA provides services you cannot get elsewhere CHOSE_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. You can get care for a service connected disability CHOSE_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The VA provides a higher quality of care CHOSE_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. You like the doctors at the VA, or you have been going there for years (that is, you are familiar with the VA) CHOSE_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. VA care costs less than other care available to you CHOSE_7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. You lost or had inadequate levels of insurance coverage CHOSE_8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. The VA provides prescription benefits CHOSE_9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. You are entitled to it CHOSE_10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Your spouse or friends suggested that you get care at the VA CHOSE_11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

63. [VAUSER = 1] Choices for your treatment or health care can include choices about medicine or other treatment. In the past 24 months, did a VA mental health provider tell you there was more than one choice for your treatment or health care? CHOICE

Yes **1**

No **0**

64. [VAUSER = 1] Did the VA mental health provider you have seen most recently help you . . .
PROF

A lot **4**

Some **3**

A little **2**

Not at all **1**

65. [VAUSER = 1] All things considered, how satisfied are you with your mental health care at the VA in the past 24 months? MH_SAT

Completely satisfied **7**

Very satisfied **6**

Somewhat satisfied **5**

Neither satisfied nor dissatisfied **4**

Somewhat dissatisfied **3**

Very dissatisfied **2**

Completely dissatisfied **1**

66. [VAUSER = 1] In the past 24 months, what effect has the counseling or treatment you got through the VA had on the quality of your life? QOL

Very helpful **5**

A little helpful **4**

Not helpful or harmful **3**

A little harmful **2**

Very harmful **1**

67. [VAUSER = 1] In the past 24 months, have you ended treatment with a VA mental health provider before the provider wanted you to? COMPL

Yes **1**

No **0**

[INTRO FOR VAUSER = 0, DISPLAY ON SCREEN FOR VAUSER = 0 FOR EACH PAGE Q68–72] Even if you haven't used the VA for mental health care, you may have impressions about their services based on what you have heard from others. Thinking about your impressions of VA mental health care since [MONTH, YEAR], please answer the next questions to the best of your ability.

68. [POSSCRN = 1 OR VAUSER = 1] Either based on your own experiences or what you have heard from others, please rate your opinion of the following aspects of VA mental health care:

	Extremely Negative 1	Somewhat Negative 2	Neutral 3	Somewhat Positive 4	Extremely Positive 5
a. Availability of needed services OPINION_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Privacy and confidentiality of medical records OPINION_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Ease of using VA mental health care OPINION_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Mental health care staff's skill and expertise OPINION_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Staff's courtesy and respect toward patients OPINION_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

69. [POSSCRN = 1 OR VAUSER = 1] How would you rate the following aspects of the VA mental health treatment facility:

	Poor 1	Fair 2	Good 3	Very Good 4	Excellent 5	Don't Know 99
a. Cleanliness of the reception/waiting area VAMHF_1	<input type="radio"/>					
b. Cleanliness of the restroom/lavatory VAMHF_2	<input type="radio"/>					
c. Availability of parking VAMHF_3	<input type="radio"/>					
d. The building overall (i.e., attractiveness of facility appearance, quality of building maintenance and upkeep) VAMHF_4	<input type="radio"/>					

70. [POSSCRN = 1 OR VAUSER = 1] How satisfied or dissatisfied are you with the availability of personnel at VA facilities offering mental health care to answer your questions. . .

	Very Satisfied 4	Somewhat Satisfied 3	Somewhat Dissatisfied 2	Very Dissatisfied 1	Does not apply, have not had this Experience 99
a. Over the phone? VASAT_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. In person once you arrive at the facility? VASAT_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How strongly do you agree or disagree with the following statements?

71. [POSSCRN = 1 OR VAUSER = 1] At the VA, you can see the same mental health care provider on most visits. MHPROV_1

- Strongly Agree **4**
 Somewhat Agree **3**
 Somewhat Disagree **2**
 Strongly Disagree **1**
 Not sure **97**

72. [POSSCRN = 1 OR VAUSER = 1] VA mental health care providers give Veterans more than one choice for treatment or health care. MHPROV_2

- Strongly Agree **4**
 Somewhat Agree **3**
 Somewhat Disagree **2**
 Strongly Disagree **1**
 Not sure **97**

Reasons for not using the VA [POSSCRN = 1 AND VAUSER = 0]

Veterans choose to use or not use the VA for mental health services for a variety of reasons. The next question is about why you have not used the VA for mental health series since [MONTH, YEAR].

73. What were the reasons you did not use the VA for mental health care services in the past 24 months?

Was it because . . .

	Yes 1	No 0
a. You were not aware of VA mental health care benefits? REAS_1	<input type="radio"/>	<input type="radio"/>
b. You do not know how to apply for VA mental health care benefits? REAS_2	<input type="radio"/>	<input type="radio"/>
c. You do not feel you deserve to receive mental health care from the VA? REAS_3	<input type="radio"/>	<input type="radio"/>
d. You do not believe you are entitled to or eligible for VA mental health care benefits? REAS_4	<input type="radio"/>	<input type="radio"/>
e. You have had a bad prior experience at the VA? REAS_5	<input type="radio"/>	<input type="radio"/>
f. You do not feel welcome at the VA? REAS_6	<input type="radio"/>	<input type="radio"/>
g. You do not trust the VA? REAS_7	<input type="radio"/>	<input type="radio"/>
h. You do not want assistance from the VA? REAS_8	<input type="radio"/>	<input type="radio"/>
i. You use other sources of mental health care? REAS_9	<input type="radio"/>	<input type="radio"/>
j. You do not need care? REAS_10	<input type="radio"/>	<input type="radio"/>
k. Some other reason? REAS_11	<input type="radio"/>	<input type="radio"/>

Opinions About Mental Health Services

[POSSCRN = 1 OR VAUSER = 1] For the next questions, think about mental health care both in the VA and outside of the VA.

74. Veterans may face obstacles getting or using mental health services for a number of reasons. Please indicate whether or not each of the following is an obstacle for you, personally, for getting or using mental health services.

	Yes 1	No 0	Not Applicable 98
a. I could lose contact with or custody of my children. DIFF_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. It would be difficult to get childcare or time off of work. DIFF_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. It could harm my career. DIFF_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. My coworkers would have less confidence in me if they found out. DIFF_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. My supervisor might respect me less or treat me differently. DIFF_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I could lose my medical or disability benefits. DIFF_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. My personal firearms could be taken away. DIFF_7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I could be denied a security clearance in the future. DIFF_8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. My friends and family would respect me less. DIFF_9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I would think less of myself if I could not handle it on my own. DIFF_10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I would be seen as weak by others. DIFF_11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. It would be too embarrassing. DIFF_12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Mental health care would cost too much money. DIFF_13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

75. [VAUSER = 1 or (CIVUSER = 1 and POSSCRN = 1)] How strongly do you agree or disagree with the following statements? Think about the mental health provider you have seen most often over the past 24 months.

	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
a. My mental health provider understands my background and values. VAMHSV_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. My mental health provider looks down on me and the way I live my life. VAMHSV_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I feel welcome at my mental health provider's office. VAMHSV_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

76. [VAUSER = 1 or (CIVUSER = 1 and POSSCRN = 1)] In the past 24 months, how often did you have a hard time communicating with your mental health provider because of accents or language barriers? LANG

- Never 4
- Sometimes 3
- Usually 2
- Always 1

77. [POSSCRN = 1 OR VAUSER = 1] In the past 24 months, have any of the following people in your life encouraged you to get treatment for PTSD or other emotional problems?

	Yes 1	No 0
a. Spouse or significant other ENCRG_1	<input type="radio"/>	<input type="radio"/>
b. Mother or father ENCRG_2	<input type="radio"/>	<input type="radio"/>

- c. Other family members ENCRG_3
- d. Other Veterans ENCRG_4
- e. Friends ENCRG_5
- f. Medical providers ENCRG_6
- g. Employers or coworkers ENCRG_7

78. [POSSCRN = 1 OR VAUSER = 1] Read each statement carefully and indicate your degree of agreement using the responses below.

	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
a. If I believed I was having a mental breakdown, my first inclination would be to get professional attention. GETHLP_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts. GETHLP_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy. GETHLP_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help. GETHLP_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
e. I would want to get psychological help if I were worried or upset for a long period of time. GETHLP_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I might want to have psychological counseling in the future. GETHLP_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help. GETHLP_7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me. GETHLP_8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. A person should work out his or her own problems; getting psychological counseling would be a last resort. GETHLP_9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Personal and emotional troubles, like many things, tend to work out by themselves. GETHLP_10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Expectations for future use of the VA [ALL RESPONDENTS]

Programming note: Display bracketed text only for VAUSER = 1 or POSUSER = 1 [Throughout the survey, you have answered questions about your past and current use of VA health services.] These last few questions are about your possible future use of VA services.

79. How likely are you to use any VA services in the future? USE_1

- Very likely 4
- Likely 3
- Somewhat likely 2
- Not likely at all 1

80. If you had a mental health need in the future, how likely would you be to use the VA for mental health services? USE_2

- Very likely → skip to CHNG 4
 - Likely → skip to CHNG 3
 - Somewhat likely → skip to CHNG 2
 - Not likely at all 1
- [IF MISSING, SKIP TO CHNG]

81. What are the reasons you do not plan to use VA mental health services in the future? Is it because . . .

	Yes 1	No 0
a. Mental health treatment generally does not work? NOUSE_1	<input type="radio"/>	<input type="radio"/>
b. You used the VA before and had a bad experience? NOUSE_2	<input type="radio"/>	<input type="radio"/>
c. You used the VA before and did not improve? NOUSE_3	<input type="radio"/>	<input type="radio"/>
d. VA doctors/staff do not provide good quality treatment? NOUSE_4	<input type="radio"/>	<input type="radio"/>
e. You prefer your civilian health care provider? NOUSE_5	<input type="radio"/>	<input type="radio"/>
f. The facilities are too far away/too hard to get to? NOUSE_6	<input type="radio"/>	<input type="radio"/>
g. The facilities are not clean or attractive? NOUSE_7	<input type="radio"/>	<input type="radio"/>
h. You would have to wait too long for an appointment? NOUSE_8	<input type="radio"/>	<input type="radio"/>

82. How important is it to you that the VA makes the following changes?

	Very Important 4	Moderately Important 3	Slightly Important 2	Not at all Important 1
a. Easier appointment process CHNG_1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Nicer facilities CHNG_2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Closer facilities CHNG_3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. More available services or facilities CHNG_4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Better quality services CHNG_5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Better quality customer service CHNG_6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

83. How likely would you be to recommend VA mental health services to other Veterans? RCCMD

- Very likely 4
- Likely 3
- Somewhat likely 2
- Not likely at all 1

84. Would you use VA mental health services by any of the following modes in the future? MODE

	Definitely Yes 4	Probably Yes 3	Probably No 2	Definitely No 1
a. In person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In order to receive your {\$5/\$20}, please confirm or update your mailing address below:

Address 1: *prefill address from frame but make editable, will need to get you the variables.*

Address 2: *prefill address from frame but make editable, will need to get you the variables.*

City: *prefill address from frame but make editable, will need to get you the variables.*

State: *prefill address from frame but make editable, will need to get you the variables.*

Zip Code: *prefill address from frame but make editable, will need to get you the variables.*

If you are satisfied with your responses, please submit your survey by clicking on the “Submit survey” button below. Once you submit your survey, you will not be able to access your survey again.

Thank you for your participation!

The information you have provided will help VA to better serve all Veterans. For more information on Department of Veterans Affairs (VA) services, please go to the VA website at <http://www.va.gov/health/>

Your answers have been submitted. You may now close your browser.

Appendix B

Supporting Documentation for the Site Visits: Questionnaires and NVivo Codes*

IOM¹ VA MH Services Evaluation

VA Staff

Discussion Protocol for Individual Interviews and Small-Group Discussions

Thank you for agreeing to participate in this discussion today. My name is _____ and this is my colleague _____. We work for Westat, a research organization based in Rockville, MD. Westat is under contract to the Institute of Medicine (IOM), part of the National Academy of Sciences, to undertake a Congressionally mandated study of the array of mental health services available to OIF/OEF/OND veterans through the VA (for example, individual or group therapy, substance abuse treatment, etc.), and to focus on why some of these veterans are not using the VA services. Maybe they have used the services in the past and stopped, or maybe they have never come to the VA for assistance. Also attending today's discussion is _____ [IOM committee member] and _____ [IOM staff member]. Today we're interested in hearing your perspectives on these issues. We want to learn what subgroups of this younger cohort of veterans you believe the VA is able to reach and serve well; which OIF/OEF/OND veterans are more difficult to engage in mental health services and why you think that may be; and we want to learn about any outreach strategies your VAMC/network is taking—or you think could take—to better engage this hard-to-reach population.

*The following documents were prepared by Westat, an independent research corporation, which assisted the committee with the design, implementation, and analysis of the site visits.

¹At the time the survey work began, the Institute of Medicine was a program unit in the National Academies. After an organizational restructuring in March 2016, the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine carries out the work previously undertaken by the Institute of Medicine.

Before we get started there are a few things I should mention. This is a research project. Your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to participate, you don't have to answer any of our questions that make you uncomfortable. We have planned for this discussion to last no more than 60 minutes.

We will be going to all 21 VISNs to see if there are common issues across geographic areas, or if there are strategies being successfully implemented in some locations that could be tried in other venues. After each visit, we will submit a brief, high level report to the VA that summarizes the major findings from the visit. This report will be submitted to the IOM's public access file for the study. We will also submit reports summarizing our findings across multiple sites to a committee that has been assembled through the Institute of Medicine; the committee will then incorporate our findings into a larger, overall report that will go to the Department of Veterans Affairs and the Congress. [If an IOM committee member is attending the visit, then note that s/he also will prepare a brief report that will be submitted to the IOM's public access file for the study.] The final report from this study is scheduled to be released to the public in mid 2017. However, your name will NOT be used in any of the reports. We aim to summarize findings such that comments cannot be attributed to a particular individual. No personally identifiable information will be shared with anyone outside of the site visit team here today. I would ask that you respect this privacy goal and that whatever is said in this room among you, stays in this room.

To further help us protect your privacy, we have obtained a certificate of confidentiality from the U.S. Department of Health and Human Services. With this certificate we cannot be forced (for example, by court order or subpoena) to disclose information that may identify you in any federal, state, local, civil, criminal, legislative, administrative, or other proceedings. The researchers will use the certificate to resist any demands for information that would identify you, except to prevent serious harm to you or others, and as explained below. You should understand that a certificate of confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself, your family, or your involvement in this study. If an insurer or employer learns about your participation, and obtains your consent to receive research information, then we may not use the certificate of confidentiality to withhold this information. This means that you and your family must also actively protect your own privacy. A certificate of confidentiality does not represent an endorsement of the research study by the Department of Health and Human Services or the National Institutes of Health. The only time we would need to break confidentiality is if we heard that someone was planning to harm him/herself or someone else.

Do you have any questions? [ANSWER ALL QUESTIONS]

Finally, with your permission, we would like to record this discussion. This recording will be used to help us recall exactly what was said when we go to summarize our findings. The recordings and any notes we have will be stored on Westat's server. They will be accessible only to the Westat project team. We will destroy the recordings after the study is complete. Are you okay with us recording?

IF PERMISSION WAS GIVEN TO RECORD ASK AGAIN IF THERE ARE ANY QUESTIONS.
ANSWER ALL QUESTIONS.

If there are no further questions or concerns, I'd like to start the audio recording now.

TURN ON RECORDER: For the purposes of the recording I am going to ask each of you to state out loud if you are willing to participate in the discussion and if I have your permission to audio tape. **GO AROUND THE ROOM AND ALLOW EACH PARTICIPANT TO STATE HIS/HER AGREEMENT TO PARTICIPATE AND BE AUDIO-RECORDED.**

I. INTRODUCTIONS

I'd like to start by having each of you introduce yourselves. Please tell us your first name only, what department you work in and your area of training (for example, "I'm a psychiatrist, but I work in primary care"), how long you've been there, and, briefly, what role you have in providing mental health services to OIF/OEF/OND veterans.

II. ACCESS

- A.** What activities or strategies undertaken by [this VA facility] do you believe to be most effective at engaging OIF/OEF/OND veterans in mental health services?
PROBE:
- What venues are most effective (e.g., health fairs, college campuses)?
 - Particular partnerships that work well?
 - Specific materials or messaging strategies that seem to reach this population the best?
- B.** How well do these strategies engage women veterans? Minority veterans?
1. What, if any, population-specific strategies have been tried that have been successful?
- C.** What, if anything, have you tried that has turned out to be completely unsuccessful? That is, you thought it would be a reasonable approach, but it turned out to be a total flop.
1. Why do you think that approach was not successful?

III. QUALITY

- A.** Which mental health services that you offer to this population are most effective and why?
- i. What does "effective" look like? For example, how do you know the veteran is getting better?
 [PROBE: Decrease in symptoms? Increased ability to live with symptoms? Able to do things with treatment that was not able to do when s/he came in for help?]
- B.** What services do you wish you could offer, but you are not able to within this facility?
- i. What would be needed in order for your facility to provide these services?
 - ii. Is there anywhere you can refer veterans to in the community who does provide this?
- C.** What sources of information does [this VA facility] use when it undertakes a quality improvement effort? Please give an example of one such effort, if possible.
- D.** What is the process by which staff can make recommendations for improvements to services? What, if any, recommendations have staff at this site made? What changes, if any, have come about as a result of those recommendations?

IV. CHOICES

- A. Of the mental health services provided by [this VA facility], which ones do OIF/OEF/OND veterans seem to like the best? Why do you think that is?
- B. What options are available to veterans if they are not happy with their clinicians or the services they are receiving?
- C. What kinds of health technologies is this facility using to support this younger population of veterans? [IF NEEDED: By health technology, we are thinking of such things as phone apps, videotelehealth services, or web-based tools.]
 PROBE:
 - Which of these services are most popular with the OIF/OEF/OND veterans?
 - Are there other services this facility is considering offering? Which ones and why?

V. BARRIERS

- A. The underlying goal of this study is to learn more about those veterans of the wars in Iraq and Afghanistan who are not using any of the services you all have described. Why do you think some OIF/OEF/OND veterans are not coming to [this VA facility] for mental health services? [PROBE: Transportation? Stigma? Not aware of available services?]
- B. Are there specific subgroups of veterans who you think are not coming to [this VA facility], e.g., veterans with particular mental health issues (e.g., veterans with MST) or specific demographic characteristics (e.g., women, minorities)? What is it about them or your services or the combination that you think is creating the barrier?
- C. How often do you think these veterans have come for services a couple of times, but then opted not to return? What factors contribute to them dropping out of VA services?
- D. What strategies is [this VA facility] exploring to better engage OIF/OEF/OND veterans who have stopped coming in—or have never come to the VA—for mental health services?

VI. GOING FORWARD

- A. What suggestions do you have for how [this VA facility] can better serve OIF/OEF/OND veterans in the future?
- B. What mental health services does [this VA facility] plan to offer in the future? What is the timeframe for implementation?

VII. CLOSING

Is there anything we didn't ask you about, but that you think is important for us to know to understand how [this VA facility] serves OIF/OEF/OND veterans?

Thank you for your time.

**IOM VA MH Services Evaluation
OEF/OIF/OND Veterans Who Are VA Service Users**

**Discussion Protocol
for Individual Interviews and Small-Group Discussions**

Thank you for agreeing to participate in this discussion today. My name is _____ and this is my colleague _____. We work for Westat, a research organization based in Rockville, MD. Westat is under contract to the Institute of Medicine, part of the National Academy of Sciences, to undertake a Congressionally mandated study assessing the array of mental health services available to OIF/OEF/OND veterans through the VA (for example, individual or group therapy, substance abuse treatment, etc.), and to focus on why some veterans from the wars in Iraq and Afghanistan are not using VA services. Maybe they received mental health services from the VA in the past and stopped, or maybe they have never come to the VA for assistance. Also attending today's discussion is _____ [IOM committee member] and _____ [IOM staff member].

Today we're interested in hearing your perspectives on these issues. First we want to hear about your experiences accessing services through the VA for any mental health condition: PTSD, depression, substance use disorder, or any other mental health issue you may have faced: How easy or difficult has it been for you to get services and, more importantly, to get services that you think are a good "fit" for you. We'd also like to hear why you think other veterans of the wars in Iraq and Afghanistan are not coming to the VA for mental health support and if there's anything that could change that: Maybe there's something the VA could do differently, maybe the veterans need more information about what's available, or maybe they're just receiving effective supports elsewhere.

Before we get started there are a few things I should mention. This is a research project. Your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to participate, you don't have to answer any of our questions that make you uncomfortable. We have planned for this discussion to last no more than 60 minutes.

We will be going to all veterans integrated service networks across the country to see if there are common issues across geographic areas, or if there are strategies or programs being successfully implemented in some locations that could be tried in other venues. After each visit, we will submit a brief, high level report to the VA that summarizes the major findings from the visit. This report will be submitted to the IOM's public access file for the study. We will also submit reports summarizing our findings across multiple sites to a committee that has been assembled through the Institute of Medicine. [If an IOM committee member is attending the visit, then note that s/he also will prepare a brief report that will be submitted to the IOM's public access file for the study.] The committee will then incorporate our findings into a larger, overall report that will go to the Department of Veterans Affairs and the Congress. The reports from this study are scheduled to be released to the public in mid 2017. However, your name will NOT be used in any of the reports and no personally identifiable information will be shared with anyone outside of the site visit team here today. I would ask that you all also respect this privacy goal and that whatever is said in this room among you, stays in this room.

To further help us protect your privacy, we have obtained a certificate of confidentiality from the U.S. Department of Health and Human Services. With this certificate we cannot be forced (for example, by court order or subpoena) to disclose information that may identify you in any federal, state, local, civil,

criminal, legislative, administrative, or other proceedings. The researchers will use the certificate to resist any demands for information that would identify you, except to prevent serious harm to you or others, and as explained below. You should understand that a certificate of confidentiality does not prevent you, or a member of your family, from voluntarily releasing information about yourself, your family, or your involvement in this study. If an insurer or employer learns about your participation, and obtains your consent to receive research information, then we may not use the certificate of confidentiality to withhold this information. This means that you and your family must also actively protect your own privacy. A certificate of confidentiality does not represent an endorsement of the research study by the Department of Health and Human Services or the National Institutes of Health.

The only time we would need to break confidentiality is if we heard that someone was planning to harm him/herself or someone else. The main risk to you in participating is that you may feel uncomfortable sharing your experiences in front of others. We have contact information for the veterans crisis line that we will have available for you at the end of the session.

Do you have any questions? [ANSWER ALL QUESTIONS]

Finally, with your permission, we would like to record this discussion. This recording will be used to help us recall exactly what was said when we go to summarize our findings. The recordings and any notes we have will be stored on Westat's server. They will be accessible only to the Westat project team. We will destroy the recordings after the study is complete. Are you okay with us recording?

IF PERMISSION WAS GIVEN TO RECORD ASK AGAIN IF THERE ARE ANY QUESTIONS.
ANSWER ALL QUESTIONS.

If there are no further questions or concerns, I'd like to start the audio recording now.

TURN ON RECORDER: For the purposes of the recording I am going to ask each of you to state out loud if you are willing to participate in the discussion and if I have your permission to audio tape. **GO AROUND THE ROOM AND ALLOW EACH PARTICIPANT TO STATE HIS/HER AGREEMENT TO PARTICIPATE AND BE AUDIO-RECORDED.**

I. INTRODUCTIONS

I'd like to start by having each of you introduce yourselves. Please tell us your first name only, what service you were in, when you separated from active duty, and how long you've been coming to the VA for mental health services.

II. ACCESS

A. Let's first talk about your experiences getting mental health services through [this VA facility]. Think back to when you first contacted the VA about getting support for whatever mental health issue you were facing. What was it like for you getting into that first appointment?

PROBE:

- How easy was it to make an appointment?
- How long did it take between the time you called and the time you had that first appointment? Was that timing okay with you, or did you think it could have happened more quickly?

- How well did you feel the clinician [e.g., social worker, psychologist] understood your needs at that first appointment?
- B.** If you recall, how much time passed between that first appointment and your next scheduled visit?
PROBE:
- Was that a reasonable timeframe or did you feel it should have happened more quickly?
 - Did you see the same therapist or doctor you saw the first time, or someone else? [IF SOMEONE ELSE] Was that okay with you or not? Explain.
- C.** Over time, what has the process been like getting follow-up mental health appointments?
PROBE:
- How often have you been able to see your clinician? Does that feel like the right time interval between appointments or would you like it to be longer/shorter? Explain.
 - How easy or difficult has it been trying to make a follow-up appointment?

III. CHOICES

- A.** What services or treatment options were offered to you? How much choice do you feel like you were given in the services you received, for example, being able to choose how much time passed between appointments or whether you took medications to address your issue? Explain.
- B.** Have any of you ever requested a change in the kind of treatment you're receiving or asked for a different staff member to help you with your mental health issues? How did staff at this facility respond to your requests?
- C.** Have any of you been using any health technologies in your treatment? By health technology we mean things like health apps on your phone, having a video conference call with your therapist rather than coming into the office, or using any online resources.
PROBE:
- How did you find out about this option? [IF NEEDED, ASK SPECIFICALLY IF CLINICIAN PROVIDED INFORMATION ABOUT IT]
 - What do you like about it? What do you NOT like about it?

IV. QUALITY

- A.** How satisfied are you with the quality of the mental health services you've received at [this VA facility]? Explain.
- B.** Do you think you are getting better as a result of the services you are receiving? Why or why not? How can you tell? [PROBE: Decrease in or less bothersome symptoms? Something you can do now that you were not able to do before you started receiving treatment?]
- a. IF NOT GETTING BETTER: What do you hope to see change that you haven't yet?
- What, if anything, do you think you need to help you get better?
- C.** What services would you like that are not currently available to you here? Explain.

V. BARRIERS

- A.** What made you decide to come to [this VA facility] for mental health services?
- B.** Do you have any friends or acquaintances from the Iraq or Afghanistan wars who need mental health services but will not come to the VA for assistance? What reasons have they given you as to why they won't come here?
PROBE [IF NOT ALREADY BROUGHT UP]:
- We have heard that some veterans face significant problems finding a way to get to the VA facility. What, if any, transportation difficulties have you had to overcome to get here? What was your solution?
 - We have also heard that some veterans are worried that they will be stigmatized if people find out they are coming to the VA for mental health services. Are you at all concerned about that? Explain.
- C.** What mental health services or supports are any of you receiving outside of the VA? What made you decide to seek those supports outside, rather than inside, the VA?

VI. GOING FORWARD

- A.** What suggestions do you have for how [this VA facility] can better serve you and other veterans of Iraq and Afghanistan who are already coming here for support? That is, what will keep you coming back if you need the help?
- B.** What could [this VA facility] do to engage those veterans of Iraq and Afghanistan who may still be in need of assistance, but who are not contacting the VA for mental health services?

VII. CLOSING

Is there anything we didn't ask you about, but that you think is important for us to know to understand your experiences receiving mental health services at [this VA facility]?

Thank you for your time.

**IOM VA MH Services Evaluation
Non-VA Clinical Staff**

**Discussion Protocol
for Individual Interviews and Small-Group Discussions**

Thank you for agreeing to participate in this interview today. My name is _____ and this is my colleague _____. We work for Westat, a research organization based in Rockville, MD. Westat is under contract to the Institute of Medicine, part of the National Academy of Sciences, to undertake a Congressionally mandated study of the array of mental health services available to Iraq and Afghanistan war veterans through the VA (for example, individual or group therapy, substance abuse treatment, etc.), and to focus on why some of these veterans are not using the VA services. Maybe they have used the services in the past and stopped, or maybe they have never come to the VA for assistance. Also attending today's discussion is _____ [IOM committee member] and _____ [IOM staff member].

Today we're interested in hearing your views about why veterans are using the services you provide, and not those offered by the VA. It could be based on your observations or on what you've heard from your clients. We would also be interested in any suggestions you may have for how service providers, including the VA, could better engage Iraq and Afghanistan war veterans in mental health services and supports.

Before we get started there are a few things I should mention. This is a research project. Your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to participate, you don't have to answer any of our questions that make you uncomfortable. We have planned for this discussion to last no more than 60 minutes.

We will be going to all 21 veterans integrated service networks to see if there are common issues across geographic areas, or if there are strategies being successfully implemented in some locations that could be tried in other venues. After each visit, we will submit a brief, high level report to the VA that summarizes the major findings from the visit. This report will be submitted to the IOM's public access file for the study. We will also submit reports summarizing our findings across multiple sites to a committee that has been assembled through the Institute of Medicine; the committee will then incorporate our findings into a larger, overall report that will go to the Department of Veterans Affairs and the Congress. [If an IOM committee member is attending the visit, then note that s/he also will prepare a brief report that will be submitted to the IOM's public access file for the study.] The final report from this study is scheduled to be released to the public in mid 2017. Your name will NOT be used in any of the reports and we aim to summarize findings such that comments cannot be attributed to a particular individual. No personally identifiable information will be shared with anyone outside of the site visit team here today. I would ask that you all also respect this privacy goal and that whatever is said in this room among you, stays in this room.

To further help us protect your privacy, we have obtained a certificate of confidentiality from the U.S. Department of Health and Human Services. With this certificate we cannot be forced (for example, by court order or subpoena) to disclose information that may identify you in any federal, state, local, civil, criminal, legislative, administrative, or other proceedings. The researchers will use the certificate to resist any demands for information that would identify you, except to prevent serious harm to you or others, and as explained below. You should understand that a certificate of confidentiality does not prevent

you, or a member of your family, from voluntarily releasing information about yourself, your family, or your involvement in this study. If an insurer or employer learns about your participation, and obtains your consent to receive research information, then we may not use the certificate of confidentiality to withhold this information. This means that you and your family must also actively protect your own privacy. A certificate of confidentiality does not represent an endorsement of the research study by the Department of Health and Human Services or the National Institutes of Health.

The only time we would need to break confidentiality is if we heard that someone was planning to harm him/herself or someone else.

Do you have any questions? [ANSWER ALL QUESTIONS]

Finally, with your permission, we would like to record this interview. This recording will be used to help us recall exactly what was said when we go to summarize our findings. The recordings and any notes we have will be stored on Westat's server. They will be accessible only to the Westat project team. We will destroy the recordings after the study is complete. Are you okay with us recording?

IF PERMISSION WAS GIVEN TO RECORD ASK AGAIN IF THERE ARE ANY QUESTIONS.
ANSWER ALL QUESTIONS.

If there are no further questions or concerns, I'd like to start the audio recording now.

TURN ON RECORDER: For the purposes of the recording I am going to ask you to state out loud if you are willing to participate in the discussion and if I have your permission to audio tape.

I. INTRODUCTIONS

I'd like to start by hearing a little bit about who you are. Please tell us what your background is (e.g., social work, psychiatry, nursing), what kind of mental health services you provide to OIF/OEF/OND veterans, and how long you've been working with the population. Also, please let us know if you are a veteran.

II. ACCESS

- A. How do veterans find out about your services? [PROBE specifically on referrals through the VA]
- B. What percentage of your clients would you estimate to be veterans of the wars in Iraq or Afghanistan?
- C. What is your capacity to serve OIF/OEF/OND veterans? For example, how long is it usually between when they first contact your agency and the time they get in for their first appointment?
 - a. What options do you have available if your agency is unable to get the veteran in for an appointment in a timely manner?
 - b. How, if at all, does your capacity to serve veterans impact your ability to serve non-veterans? Explain.
- D. Describe your working relationship with the VA. [PROBE: MOUs? Referrals either direction? IF NO WORKING RELATIONSHIP – Explain.].

III. QUALITY

- A. What services does your agency/organization offer that you believe are most effective at meeting the mental health needs of your OIF/OEF veterans? What evidence do you have that these services are effective? [PROBE: Are the veterans getting better? How do you know? Able to do something after receiving services that could not do when first came in for help?]
 - i. How do you perceive the quality of services being provided to veterans by other organizations in the community, including the VA? Explain.

IV. CHOICES

- A. Of the many services your agency offers, which do veterans prefer? Why do you think that is?
- B. What options are available to veterans if they are not happy with their clinicians or the services they are receiving?

V. BARRIERS

- A. What kinds of things are preventing OIF/OEF veterans coming in for mental health services? [PROBE ON: stigma; lack of awareness of problems; medical records and job limitations; other issues that have emerged during site visit, e.g., gun ownership]
- B. For veterans who have come for services a couple of times, but then dropped out, what factors contribute to them stopping care?

VI. GOING FORWARD

- A. What suggestions do you have for how your agency can better serve Iraq and Afghanistan war veterans in the future?
- B. What suggestions do you have for how the VA can better engage this population of veterans?

VII. CLOSING

Is there anything we didn't ask you about, but that you think is important for us to know to understand how your agency serves Iraq and Afghanistan war veterans?

Thank you for your time.

**IOM VA MH Services Evaluation
OEF/OIF/OND Veterans Who Are Not Using VA Mental Health Services**

**Discussion Protocol
for Individual Interviews and Small-Group Discussions**

Thank you for agreeing to participate in this interview today. My name is _____ and this is my colleague _____. We work for Westat, a research organization based in Rockville, MD. Westat is under contract to the Institute of Medicine, part of the National Academy of Sciences, to undertake a Congressionally mandated study assessing the array of mental health services available to veterans of the wars in Iraq and Afghanistan through the VA (for example, individual or group therapy, substance abuse treatment, etc.), and to learn why some veterans, like yourself, have either never gone to the VA for these services, or went a couple of times and decided not to go back. Also attending today's discussion is _____ [IOM committee member] and _____ [IOM staff member]. Today we'd like to hear your experiences with or views on the VA and find out if there's anything you think the VA might be able to do differently to ensure that veterans from the wars in Iraq and Afghanistan have access to needed mental health (mental health and substance use) services and supports.

Before we get started there are a few things I should mention. This is a research project. Your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to participate, you don't have to answer any of our questions that make you uncomfortable. We have planned for this interview to last no more than 60 minutes.

For this study, we will be going to all veterans integrated service ["health"] networks across the country to see if there are common issues across geographic areas, or if there things being done successfully in some locations that could be tried in others. After each visit, we will submit a brief, high level report to the VA that summarizes the major findings from the visit. This report will be submitted to the IOM's public access file for the study. We will also submit reports summarizing our findings across multiple sites to a committee that has been assembled through the Institute of Medicine; the committee will then incorporate our findings into a larger, overall report that will go to the Department of Veterans Affairs and the Congress. [If an IOM committee member is attending the visit, then note that s/he also will prepare a brief report that will be submitted to the IOM's public access file for the study.] The final report from this study is scheduled to be released to the public in mid 2017. Your name will NOT be used in any of the reports and we aim to summarize findings such that comments cannot be attributed to a particular individual. No personally identifiable information will be shared with anyone outside of the site visit team here today. I would ask that you all also respect this privacy goal and that whatever is said in this room among you, stays in this room.

To further help us protect your privacy, we have obtained a certificate of confidentiality from the U.S. Department of Health and Human Services. With this certificate we cannot be forced (for example, by court order or subpoena) to disclose information that may identify you in any federal, state, local, civil, criminal, legislative, administrative, or other proceedings. The researchers will use the certificate to resist any demands for information that would identify you, except to prevent serious harm to you or others, and as explained below. You should understand that a certificate of confidentiality does not prevent

you, or a member of your family, from voluntarily releasing information about yourself, your family, or your involvement in this study. If an insurer or employer learns about your participation, and obtains your consent to receive research information, then we may not use the certificate of confidentiality to withhold this information. This means that you and your family must also actively protect your own privacy. A certificate of confidentiality does not represent an endorsement of the research study by the Department of Health and Human Services or the National Institutes of Health.

The only time we would need to break confidentiality is if we heard that someone was planning to harm him/herself or someone else.

The main risk to you in participating is that you may feel uncomfortable sharing your experiences in front of others. We have contact information for the veterans crisis line that we will have available for you at the end of the session.

Do you have any questions? [ANSWER ALL QUESTIONS]

Finally, with your permission, we would like to record this interview. This recording will be used to help us recall exactly what was said when we go to summarize our findings. The recordings and any notes we have will be stored on Westat's server. They will be accessible only to the Westat project team. We will destroy the recordings after the study is complete. Are you okay with us recording?

IF PERMISSION WAS GIVEN TO RECORD ASK AGAIN IF THERE ARE ANY QUESTIONS.
ANSWER ALL QUESTIONS.

If there are no further questions or concerns, I'd like to start the audio recording now.

TURN ON RECORDER: For the purposes of the recording I am going to ask you to state if you are still willing to participate in this interview and if I have your permission to audio tape our discussion.

I. BACKGROUND

I'd like to start off by having you tell us a little about your military career. What year you enlisted; what branch of the service were you in; if you were in theater, when and where; and then how long ago you separated from the military.

Briefly, what's been going on in your life since you separated from the service? (Work? School? Married? Kids?)

II. EXPERIENTIAL NARRATIVE

As I mentioned, we're interested in learning about the mental health services the VA offers and finding out why some veterans of the wars in Iraq and Afghanistan choose to get mental health assistance from non-VA providers. I'd like you to tell me a story about your experiences getting mental health services that you believe to be a good fit for you. I'm particularly interested in hearing about any experiences you may have had with mental health services through the VA or, if you never contacted the VA, why not. You can start your story wherever you like and you can talk as long as you like, but tell me whatever

you think is important for me to hear to understand your journey to getting mental health services with which you are satisfied.

POSSIBLE PROBES:

- Thinking back, what led you to make that first phone call about getting mental health support? (Self-aware? Family or friend said something?)
- What resources did you use to look for services? (Military One Source? Friend? Internet?)
- What, if any, experience did you have with the VA?
 - IF NEVER CONTACTED THE VA, ASK WHY NOT. PROBE ON STIGMA, NEGATIVE PERCEPTIONS OF VA SERVICES, ETC.
 - IF WANTED BUT NEVER RECEIVED VA SERVICES
 - Why didn't you go through the VA for mental health assistance? (Long time to first appointment? Location where there was an available provider too far away?)
 - If [BARRIER DESCRIBED ABOVE] could be taken care of, would you consider the VA if you need mental health services in the future? Explain.
 - IF RECEIVED SERVICES THROUGH VA BUT STOPPED
 - What was your experience with the services you received at the VA?
 - IF POSITIVE EXPERIENCE: Why did you stop?
 - IF BAD EXPERIENCE: What made it a negative experience?
 - If you were to need mental health services in the future, would you consider looking at the VA again? Why or why not?
- How did you determine that the [SERVICES CURRENTLY RECEIVING] are the best fit for you?

III. GOING FORWARD

What advice would you give to other veterans of the wars in Iraq and Afghanistan who are looking for supports for a mental health disorder?

- Would you encourage them to contact the VA? Why or why not?

Is there anything else you would like to tell me about your experience? Thank you for your time.

**IOM VA MH Services Evaluation
Family/Friends of OIF/OEF/OND Veterans
Who Are Not Using VA Mental Health Services**

**Discussion Protocol
for Individual Interviews and Small-Group Discussions**

Thank you for agreeing to participate in this interview today. My name is _____ and this is my colleague _____. We work for Westat, a research organization based in Rockville, MD. Westat is under contract to the Institute of Medicine, part of the National Academy of Sciences, to undertake a Congressionally mandated study assessing the array of mental health services available to veterans of the wars in Iraq and Afghanistan through the VA (for example, individual or group therapy, substance abuse treatment, etc.). We are also tasked with learning why some of these veterans either never have gone to the VA for these services, or went a couple of times and decided not to go back. Also attending today's discussion is _____ [IOM committee member] and _____ [IOM staff member]. Today we'd like to hear about your experiences trying to encourage a veteran from one of these recent conflicts to seek help for a mental health disorder. We're interested in where you sought information about services and the veteran's response to your efforts. We're also interested in your suggestions for things the VA could do to ensure that veterans from the wars in Iraq and Afghanistan have access to needed mental health services and supports.

Before we get started there are a few things I should mention. This is a research project. Your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to participate, you don't have to answer any of our questions that make you uncomfortable. We have planned for this interview to last no more than 60 minutes.

For this study, we will be going to all veterans health networks across the country to see if there are common issues across geographic areas, or if there things being done successfully in some locations that could be tried in others. After each visit, we will submit a brief, high level report to the VA that summarizes the major findings from the visit. This report will be submitted to the IOM's public access file for the study. We will also submit reports summarizing our findings across multiple sites to a committee that has been assembled through the Institute of Medicine; the committee will then incorporate our findings into a larger, overall report that will go to the Department of Veterans Affairs and the Congress. [If an IOM committee member is attending the visit, then note that s/he also will prepare a brief report that will be submitted to the IOM's public access file for the study.] The final report from this study is scheduled to be released to the public in mid 2017. Your name will NOT be used in any of the reports and we aim to summarize findings such that comments cannot be attributed to a particular individual. No personally identifiable information will be shared with anyone outside of the site visit team here today. I would ask that you all also respect this privacy goal and that whatever is said in this room among you, stays in this room.

To further help us protect your privacy, we have obtained a certificate of confidentiality from the U.S. Department of Health and Human Services. With this certificate we cannot be forced (for example, by court order or subpoena) to disclose information that may identify you in any federal, state, local, civil, criminal, legislative, administrative, or other proceedings. The researchers will use the certificate to resist

any demands for information that would identify you, except to prevent serious harm to you or others, and as explained below. You should understand that a certificate of confidentiality does not prevent you, or a member of your family, from voluntarily releasing information about yourself, your family, or your involvement in this study. If an insurer or employer learns about your participation, and obtains your consent to receive research information, then we may not use the certificate of confidentiality to withhold this information. This means that you and your family must also actively protect your own privacy. A certificate of confidentiality does not represent an endorsement of the research study by the Department of Health and Human Services or the National Institutes of Health.

The only time we would need to break confidentiality is if we heard that someone was planning to harm him/herself or someone else.

Do you have any questions? [ANSWER ALL QUESTIONS]

Finally, with your permission, we would like to record this interview. This recording will be used to help us recall exactly what was said when we go to summarize our findings. The recordings and any notes we have will be stored on Westat's server. They will be accessible only to the Westat project team. We will destroy the recordings after the study is complete. Are you okay with us recording?

IF PERMISSION WAS GIVEN TO RECORD ASK AGAIN IF THERE ARE ANY QUESTIONS.
ANSWER ALL QUESTIONS.

If there are no further questions or concerns, I'd like to start the audio recording now.

TURN ON RECORDER: For the purposes of the recording I am going to ask you to state if you are still willing to participate in this interview and if I have your permission to audio tape our discussion.

IV. BACKGROUND

I'd like to start off by having you tell us a little bit about yourself: How long have you lived in this area? What kind of work do you do. (For example, do you have any experience with providing mental health services?) And how is the veteran related to you? (Child? Spouse? Friend?)

V. EXPERIENTIAL NARRATIVE

I'd like you to tell me a story about your experiences trying to get your family member/friend into mental health services. I'm particularly interested in hearing about any experiences you may have had with working with the VA or, if you never contacted the VA, why not. I'm also interested in hearing about the veteran's reactions to any recommendations you tried to make. You can start your story wherever you like and you can talk as long as you like, but tell me whatever you think is important for me to hear to understand what you've tried to do for your friend/family member and what you think his/her barriers to service use are.

POSSIBLE PROBES, dependent upon the flow of the narrative:

- Thinking back, what led you to first talk with your friend/family member about getting help? (Troubling behavior? Worrisome things the person was saying?) How receptive was s/he to that conversation? Explain.

- Did you make any phone calls to try to find services for your friend/family member?
IF YES:
 - Whom did you call? How helpful were the people with whom you spoke? Explain.
 - What, if any, experience did you have contacting the VA? IF NEVER CONTACTED THE VA, ASK WHY NOT. PROBE ON STIGMA, NEGATIVE PERCEPTIONS OF VA SERVICES, ETC.
- What, if any, VA or military resources did you use? How useful were those? Explain.
- Did your friend/family member make any calls to try to find services? IF YES, PROBE ON WHO WAS CALLED, THE HELPFULNESS OF THE CONTACTS.
- Did your friend/family member ever contact the VA about receiving services there?
 - IF NO – Why do you think s/he didn't explore what was available through the VA?
 - IF YES BUT DIDN'T GET SERVICES – What was the reason s/he wasn't able to obtain services through the VA? [PROBE ON EASE AND TIMELINESS OF GETTING AN APPOINTMENT; ABILITY TO GET TRANSPORTATION TO THE VA; DIDN'T HAVE DESIRED SERVICES]
 - IF RECEIVED SERVICES THROUGH VA BUT STOPPED
 - Why did s/he stop going to the VA? [PROBE ON ABILITY TO GET FOLLOW-UP APPOINTMENT WITH SAME CLINICIAN OR IN A TIMELY MANNER; CONCERN ABOUT STIGMA; DIFFICULTY GETTING TO THE FACILITY]
 - What, if anything, did the VA do to try to re-engage your friend/family member? Why do you think those efforts did not work?
 - What do you think they could have tried to do to re-engage your friend/family member, but did not? Why do you think that might have been successful?

VI. GOING FORWARD

What advice would you give to other family members or friends who are trying to get their friends/family members who are veterans of the wars in Iraq and Afghanistan into services for mental health disorders?

- Would you encourage them to contact the VA? Why or why not?

Is there anything else you would like to tell me about your experience? Thank you for your time.

Question Matrix for Ad Hoc Interviews in the Community

Area of inquiry	Questions to address
Access	<ul style="list-style-type: none"> ■ Are mental health (MH) services at the VA and in the community sufficient to meet the initial and ongoing needs of the veterans of the wars in Iraq and Afghanistan? ■ What MH services are available to veterans, including psychotherapy and pharmacotherapy? ■ At the VA and/or community setting, how long does it take to receive an intake appointment, be assigned a caseworker or therapist, and see a psychiatrist, etc.? How long does it take to get a follow-up appointment?
Pathways to care	<ul style="list-style-type: none"> ■ How do VA MH services fit into the local community and local continuum of care? ■ How do the veterans of the wars in Iraq and Afghanistan find out about, access and utilize mental health services in the VA system? In the community? ■ Do providers offer extended/alternate hours to veterans? If so, are veterans making use of these times or are other accommodations needed?
Engagement	<ul style="list-style-type: none"> ■ What outreach efforts to the veterans of the wars in Iraq and Afghanistan have been successful? Why? ■ Why do veterans discontinue treatment? ■ How inviting and hospitable are VA MH care facilities? How do VA facilities compare to community providers in this respect? What could be done to make facilities more inviting?
Choice	<ul style="list-style-type: none"> ■ What processes are in place at the VA and community clinics for accommodating the values and preferences of the veterans of the wars in Iraq and Afghanistan? ■ What do patients like about the services and what do they dislike? What would increase patient satisfaction with services?
Barriers	<ul style="list-style-type: none"> ■ What forms of technology are useful to veterans in their mental health services ■ What are the challenges that veterans face in getting care for their mental health problems? ■ How might these barriers to treatment be better addressed by the VA? By community providers?
Quality	<ul style="list-style-type: none"> ■ How much stigma do veterans who receive mental health treatment face? How do you know? ■ What is the quality of mental health care provided at the VAMC, small and medium-sized CBOCs, and CBOCs in rural areas? ■ What is the quality of care among community-based mental health service providers? ■ For both VA and non-VA providers, how is quality assessed? What TQI processes are in place specifically to improve mental health services among this population? ■ What is the role of technology in improving the delivery of quality services?
Planning	<ul style="list-style-type: none"> ■ What MH services are VA facilities planning for the future? What services are being planned in the community? ■ How were these services identified? ■ What steps are being taken to increase the engagement of the veterans of the wars in Iraq and Afghanistan in treatment?

NVIVO CODES
ACCESS AND AVAILABILITY

Code	Description
Examples of Easy Access	Veterans said they had no difficulty getting into the VA for services. Examples include Veterans who transferred from a Warrior Transition Unit (WTU) or Military Treatment Facility (MTF) or who had someone who helped them gain entry.
Navigators	Veteran had someone help him or her figure out the VA system, how to enroll, etc.
Navigation Challenges	Instances in which the Veteran described not knowing how to get into or through the VA bureaucracy. Also used for discussions that reflect the “total institution” of the military, i.e., that while in the military, a person is told what to wear, when to eat, etc.
Pathways to Care	High level category on how Veterans get into mental health care.
Emergency	Veteran presents in either a psychiatric or financial crisis
Ultimatum	Family member encouraged the Veteran or made an ultimatum (“get help or else I leave”).
Unique Outreach Practices	Instances where an interviewee described an outreach strategy that seemed really new and different.
Word of Mouth	Friends suggested the individual get help or the person found out about the VA services through word of mouth.
Referrals Out	The VA may not have capacity, but does the community and is the VA using it?
Actively Referring	For those instances in which VAMCs that had excellent partnerships with community providers, Vet Centers, and the like.
Referral Barriers	Things that impeded referring out, even when the VA did not have capacity.
<u>Choice</u>	All references to use (or not) of the Choice program should be coded here.
<u>Cost</u>	Use this code if the barrier to a referral is the cost of the therapy to the Veteran.
<u>VA Staff Attitudes</u>	This code references VA staff who said they would not refer Veterans out of the VA because they didn’t believe the community had the ability to appropriately care for the Veterans. Also code those instances when staff said there were recordkeeping challenges when working with community providers.
Service Capacity	High-level code that refers to distinctly negative instances of the system supply being able to meet the demand.
No Capacity Problems	Comments from staff or Veterans that indicate they have no difficulty getting people in for appointments.
Things Affected by	Category reflects those aspects of service delivery that are impacted by tight capacity.
<u>Appointment Issues</u>	Problems with appointments that Veterans and staff noted as a result of the pressures on the system.
<i>Cancellations</i>	Those instances in which Veterans discussed cancellations as an apparently structural problem. It was particularly evident when Veterans described having cancelled appointments recoded as “no shows” or finding out the appointment was cancelled when they arrived at the facility.
<i>Frequency</i>	Those instances in which follow-up appointments were being scheduled at long intervals (e.g., 3-6 months instead of monthly).
<i>Length</i>	Mentions of undesirably short appointments (e.g., 20 minutes with a counselor, 5 minutes with a psychiatrist).
<i>Scheduling</i>	For all challenges around scheduling appointments, including admin issues that get in the way, dedicated “clinics” that can’t be changed in the scheduling system, etc.
<i>Type of Appointment</i>	Veteran is unable to get the type of appointment s/he wants. This may be group instead of individual counseling, or psychiatry and no counseling.
<i>Type of Therapist</i>	Use specifically for male vs. female or psychiatrist vs. psychologist (or psychologist vs. social worker).

continued

NVIVO CODES
ACCESS AND AVAILABILITY

Code	Description
<u>Lack of Space</u> <u>Wait Times</u>	Not enough, wrong type, no privacy, dangerous Instances in which interviewee said Veterans have to wait a long time (subjective or objective comment) to get into services.
Things Affecting	Codes here refer to a small set of issues that were perceived to be contributing to a backlog in the system.
<u>Admin Responsibilities</u>	Mentions of clinical staff's administrative responsibilities either taking up clinical time, too much time, or having to be done in off hours.
<u>Caseload</u> <u>Blockers</u>	References to the difficulties of large caseloads. References to people "clogging up" the system, thus preventing appointments from being available to others. Usually this is due to people who request long-term therapy, but could be due to other things.
<u>HR</u>	References to HR hiring practices, particularly the slowness with which they fill open positions.
<u>No Shows</u>	Staff in several sites complained that more services would be available if patients actually showed up for their appointments. Also code those instances in which Veterans indicated their appointments were coded as a "no show" inappropriately.
<u>Staff Turnover</u>	This code should be used when tagging comments about high staff turnover, e.g., regular employees OR interns coming in and leaving after a short period of time (sometimes "to get their card stamped" for other VA positions).

BARRIERS

Code	Description
Bad Reputation of VA	Various instances in which interviewees reported the VA has a negative public image.
Media	Bad reputation via media reports, press coverage, negative incidents.
Rumor Mill	Use for instances of the rumor mill among peers or the local community (not relatives).
Sins of the Father	Specific cases when Veterans mentioned that they did not want to go to the VA because a father, brother, uncle, grandfather had had a bad experience.
Barriers NOS	"Barriers not otherwise specified"—for barriers that do not fit into the extant categories.
Being Around Other People	Veterans report that they do not want to go to the VA because they cannot be around others.
Built Environment	This denotes a broad array of things including inadequate parking, a structure or even internal set-up that is a trigger for someone with PTSD, or overcrowding/uncomfortable space. Issues around the facility having a reputation as a gathering place for homeless people should be coded under the Welfare code, below.
Childcare	Veteran cannot get to services because either cannot arrange or pay for childcare.
Civilians	Comments from Veterans about civilians (for positive comments, double-code)
Communication	This code should be used for all instances in which interviewees describe either communication (phone, email, text) challenges or successes. Telehealth can also be coded to this category.
Competing Demands	This refers to work, school, family demands only with the result being the Veteran does not have time to take care of him/herself.
Customer Service	Code both positive and negative customer service experiences here. In general this has come up in reference to admin staff (MAS), not clinicians.
Disability Compensation	Used for those comments suggesting Veterans are reluctant to seek care because it may reduce their disability rating and compensation.
DoD to VA	References to the linkage between getting out of active duty and becoming a Veteran. May be about records, DD214, communication, etc.
Eligibility	Determination of eligibility—and issues around that (e.g., timing, lost in the system, poor communication)—as a barrier to care.

Code	Description
Employment	This code refers specifically to concerns Veterans expressed about how receipt of MH care would affect their jobs or possibilities for employment, including their position in the National Guard or their reenlistment possibilities. It should include things like not being able to obtain security clearances or driver’s licenses as well.
Financial Distress	Instances in which financial distress of Veterans was discussed in relation to care.
Guns	Veteran will not seek care because of concern about loss of weapons or inability to purchase weapons.
Actual Loss of Weapons	Instances in which either the interviewee or someone s/he knew directly lost his/her firearms as a result of seeking mental health care. Rumors are not included under this code, only those instances that are based on first-hand knowledge.
Information Privacy	Respondent expressed concern that health records or other information will not be kept private by the VA.
Knowledge gap	Refers specifically to information obtained (or not) at the point of transition from DoD. Also include instances in which the individual did not know s/he was a Veteran or believed that the VA was for someone else (e.g., older people, people who were injured in combat). It does not refer to navigational challenges per se.
Bad Information	Veteran was misinformed about care, eligibility for care (double code), where to go, etc.
LGBT Specific Issues	Specific discussions related to LGBT access to care.
Military Cultural Expectations	Refers to carryover from the Veteran’s experience in the military—“suck it up, buttercup,” worries that the docs will be as bad as military docs, worries that there will be no confidentiality like in DoD, etc.
Not Aware of Need	Veteran indicates not seeking treatment because of a lack of perceived need. “I’m fine.”
Service Hours	For all cases in which the speaker talks about the hours during which VA services are being offered AND Vet Center or community-based services.
Stigma about MH Care	Refers both to internal (“I thought I was a failure”) and external (“I was embarrassed”) stigma.
Transportation	Any reference to transportation challenges, including lack of a car, gas money, public transportation, inability to drive because of PTSD, etc. Include any references to travel reimbursement here.
VBA to VHA Issues	Confusion between VBA and VHA.
Welfare Carryover	Instances in which speaker’s comment suggests a perception - either on their part or about them by someone else - that the VA and its services constitute a welfare system with cheaters in it. Comments about the front waiting area looking like everyone is homeless should be added to this category.
Women-Specific Issues	Issues raised that are keeping women from seeking services at the VA.
Positive	Additional code if something that is labeled as a barrier, but interviewee indicates it has been overcome in a particular instance. For example, “We have excellent childcare services here” should get double-coded “childcare” and “positive.”

PROMISING PRACTICES (PP)

Code	Description
PP Call It Something Else	Examples where creative terminology has been used instead of a standard term that has a negative connotation for Veterans (“psycho-education class” vs. “treatment orientation group”).
PP Customer Service	Examples of positive customer service.
PP Peers	Examples of peer support services that are perceived to be effective.
PP Positive Ads	Examples of positive marketing.
PP Preventing Dropout	Examples of effective strategies to reduce premature drop-out.
PP Process Review	Examples where the VA has undertaken a review of procedures and made adjustments on the basis of findings.

continued

PROMISING PRACTICES (PP)	
Code	Description
PP Scheduling	Examples of scheduling system that works.
PP Spouse Outreach	Examples of reaching out to spouses (education) to encourage them to bring Veteran in for care.
PP Telehealth	Examples of effective telehealth.
PP Women's Issues	Examples where services have been adjusted to meet women's needs.
QUALITY	
Code	Description
Drop Out	Veteran quits treatment for one reason or another.
Modification to Evidence Based Therapy (EBT)	Code all instances in which VA staff or Vet Center staff indicate that they have somehow modified the EBT they are discussing.
Efficiency	Refers to a dimension of quality that ensures that resources are not wasted unnecessarily. Examples are of efforts on the part of the VA to be "good stewards of the resources," for example, groups versus individual therapy, use of time-limited EBTs instead of individual therapy without time limits, etc.
Getting Better	Instances in which Veterans said the quality was good because they have improved, or in response to what "getting better" would look like.
Satisfaction	Broad category to reflect Veterans' discussions about their satisfaction or dissatisfaction with services received.
Not Satisfied	Specific issues identified by Veterans as resulting in unsatisfactory clinical experiences. ACCESS or APPOINTMENT CHALLENGES not coded here.
<u>Bad Fit</u>	Interviewee indicates that there was a "bad fit" between the Veteran and the clinician.
<u>Lack Cultural Competence</u>	Instances in which Veterans said their clinicians did not have an adequate understanding of military culture.
<u>Medication Management</u>	Interviewee expressions of dissatisfaction with medication management.
<u>Negative Clinical Demeanor</u>	All references to ACTIONS on the part of the clinician that were unsatisfactory to the Veteran. These include not making eye contact during the appointment, not listening to the Veteran (e.g., not paying attention or not giving the Veteran time to speak), being dismissive ("I've had other patients worse than you"), etc.
<u>Overwhelming</u>	Statements about how the therapies offered by the VA are overwhelming to Veterans without preparation, or without proper social support.
<u>NEG Young Clinician</u>	Specific references to the clinician being too young (from the Veteran's perspective) and thus not mature enough or experienced enough to deal with Veterans' issues.
Satisfied	
<u>Camaraderie</u>	Use this code when a Veteran or clinician mentions that camaraderie in treatment (usually in groups) led to good treatment.
<u>Cultural Competence</u>	Instances in which clinician was said to understand the military or when Veterans discuss peer support groups.
<u>Goes the Extra Mile</u>	Veterans said they felt like they mattered to the clinician (as a unique person). This includes returning phone calls, remembering anniversary dates, adjusting appointment times, etc.
<u>Patient-Centered</u>	Examples from Veterans and clinicians that describe satisfaction with services because they are patient-centered—that is—they meet the preferences of the Veteran.
<u>Positive Clinical Demeanor</u>	Use for the positive examples of eye contact, listening, hearing, etc., but also for those cases in which the Veteran said, "She cares about me." He believes in me," "I trust him."
<u>POS Young Clinician</u>	Veteran discusses feeling positively about a young, new clinician because he or she is fresh and enthusiastic.
Wellness Activities	Instances in which the VA or a community provider was using a range of therapies, including yoga, meditation, etc. for healing.

RECOMMENDATIONS	
Code	Description
Better Data	Suggestion that better data would allow for more appropriate treatment.
Customer Service	Suggestions around improving the customer service experience at the VA.
Hire More Staff	
Case Managers	Interviewee said VA needs more case managers.
Clinical Staff	Interviewee said VA needs more clinicians (psychologists, prescribers, RNs).
Support Staff	Interviewee suggested the VA hire more admin/support staff.
Improve Communication	
Alternate Communication	Recommendations for alternative ways for VA and Veterans to communicate. This includes texting, better phone systems, people answering the phones, etc.
VA Internal Communication	Recommendation for improved communication <i>within</i> the VA (either within one facility/system or between systems).
Marketing Word of Mouth	Recommendation that the VA needs to do a better job advertising its services, eligibility, etc. to Veterans.
Gun Information	Specific recommendations that the VA indicate the rules about seeking mental health treatment and the impact on gun ownership.
Out-Processing Changes	Recommendations for how out-processing from active duty to the VA could be improved for the Veteran.
DOD Link to VA	Specific discussions about the need to better link the DOD and VA, including record transmission.
Private Sector	Broad code regarding recommendations for the VA's connection with private sector care. Included under this heading are comments about outsourcing Veterans, use of the Choice program, and the need for the VA to work more collegially with private sector organizations.
Recommendations for Therapies	Recommendations specifically having to do with treatment, therapeutic options, etc.
Alternative Therapies	Recommendations for non-traditional treatments, including yoga, mindfulness, use of medical marijuana, etc.
Promote Recovery	Comments about the VA's need to take a more recovery-oriented approach to care (or strengths-based orientation).
Recommendations for MST	Recommendations about better treatment for survivors of Military Sexual Trauma (MST).
Spouse or Family	Suggestions that the VA needs to begin to treat the whole family, not just the Veteran.
Recommendations for Women	Specific recommendations to improve access to care for women Veterans.
Reduced Bureaucracy	Recommendations for getting around the bureaucracy, which is seen as a barrier to efficient and effective treatment, scheduling, etc.
Accountability	Sense that the VA does not get rid of staff who perform poorly on the job. In general, Veterans mentioned this with respect to clerks and front-line customer service, although it was also raised with respect to clinicians.
Flexible Hours	Suggestions that the VA have greater flexibility in when it offers services. In some locations, VA staff noted that their building contracts prevent the facility from being open outside the contracted hours.
Local Flexibility	Recommendations for more local control of the service delivery system (including treatments, hours, etc.).
Scheduling	Recommendations for how to improve the way appointments are scheduled.
Staff Appreciation	Recommendations for how to improve staff morale.
Take Services to Patients	Suggestions that the VA take more services out to the patients rather than requiring patients to come into a central facility for care. There was some discussion of more mobile vans, but other "out service" suggestions are also included here.
Training	Recommendations for where training (generally) could be improved.
VBA Recommendations	Specific recommendations for making sure VBA and VHA are clearly separated for the Veterans.
Veteran Employees Volunteers	Recommendations for increased presence of Veterans at the VA, either as regular employees, peer supports, greeters, patient advocates, and the like.

